

THE DENTAL DIGEST



SEPTEMBER 1911
VOL XVII NO. 9.

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THE DENTAL DIGEST

GEORGE WOOD CLAPP, D.D.S., Editor

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Vol. XVII

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No. 9

TUBERCULOSIS OF THE OROPHARYNX*

By WILLIAM H. DEFORD, D.D.S., M.D., DES MOINES, IOWA

PART I

TUBERCULOSIS is the most dreadful scourge of mankind. In this country alone each year enough people succumb to this malady to make eight armies the size of the standing army of the United States. That is not all. It is estimated that eight or ten times this number are affected to some extent by this disease.

One death in every seven reported is from tuberculosis. Each year the world yields up 1,095,000; each day, 3,000; each minute, two of its people, as a sacrifice to this plague.

Whether we are aware of the fact or not, the dental surgeon operates every day in the mouths of those who are exhaling millions of tubercular bacilli, and try as he may cannot help inhaling these germs. On the other hand, many dental surgeons, tubercular themselves, whether they are aware of it or not, from the position they occupy in close proximity to their patients, exhale their effluvia, which in turn goes into the nose, mouth, pharynx, larynx, stomach and lungs of their patients. So, from the very nature of our work, we are in a position either to contract or impart this, the most devastating of all diseases. You will also observe, that this disease is most prevalent, and the mor-

* I am indebted to Dr. Daniel S. Newman of Denver for reprints of his own papers on the subject of tuberculosis, and other literature and translations which I was unable to find elsewhere.

tality greatest, at the time in life that dental caries is most prevalent, the age at which most people visit our offices, between fifteen and forty-four years of age.

I have no statistics at hand, to show the percentage of dental surgeons who are supposed to have tuberculosis, but I do know that the number thus affected is large. You have only to visit those states, the climate of which is peculiarly helpful to this condition, even though the state dental boards conduct an almost prohibitive examination, to satisfy yourself that the number is alarmingly large.

A few years ago I stepped off the train at a town in Southern California, where the population of which, in this State, would have justified not over twenty dentists, yet the directory showed seventy-two. Some of these men operated only half a day, others had offices fitted up in their residences and saw an occasional patient, while others were content with an extraction now and then, to help meet expenses, all working away in the beautiful sunshine with its health-restoring properties, among the ever-blooming roses, and calla lilies, oranges, lemons, olives, figs, and other fruits and vegetables, hoping, ever hoping, and firmly believing, that in a short while each would return to his eastern home to resume practice.

The dental surgeon seldom ever thinks of the risk he is taking of acquiring tuberculosis, but is ever alert and watchful lest he should contract syphilis from some of his patients. The chances of contracting syphilis while operating in the mouth of a patient are remote. In order to contract syphilis, the patient must have either a chancre or a mucous patch, and the dental surgeon an abrasion of the skin or an open wound into which the secretion from these lesions would lodge and be absorbed, and not be overcome by natural immunity.

Many, many dental surgeons have never seen a chancre or mucous patch in the mouth of a patient, but no dental surgeon escapes for a single day operating in a field rich in tubercular bacilli. It becomes important then, that we should exercise every precaution lest we become infected while working in the mouths of the tuberculous, and equally important that we should not be the means of imparting tuberculosis to those who intrust themselves to our care, either personally or from the instruments we employ. Osler says, "No other disease is so widespread, or produces so much poverty, and long-continued distress."

The word tuberculosis, to most people, is synonymous with consumption. While the lung is the organ most frequently involved, it is well to bear in mind that tubercular deposits are found throughout the digestive tract, from the lips to the anus, and tuberculosis attacks every

tissue and organ in the body. The lips, the gums, the cheeks, the hard and soft palate, the maxillary bones, the nares, the tonsils, the larynx, the pharynx, the uvula, are subject to this condition, and carious teeth, and pyorrhea pockets, teem with tubercular bacilli.

I have said that in order to contract syphilis while operating in the mouth one must be infected by the secretion from a mucous patch or a chancre, but you will recall that the mucous patch and the chancre are of but a few days' duration. Also, that if one is infected by either of these lesions, a chancre appears at the place of infection, and the unfortunate one knows that he has contracted syphilis. But when we become infected by tubercular bacilli, it may be weeks, months, and years before we are aware of the presence of this disease, and during all this time, in our ignorance, various tissues and organs are becoming involved, and in our innocence we may be the means of imparting the same condition to others.

As tuberculosis arises mainly from oral and pharyngeal infection, and infectious material passing into the system through the mouth, the dental surgeon becomes a most important factor—I might say, the most important factor—in preventing tuberculosis of the oropharynx and lungs.

Tuberculosis is caused by the bacilli tuberculosis. It is a chronic disease characterized locally by numerous, yes, countless tubercles visible to the naked eye. The tubercle bacilli belong to the lowest scale of vegetable life, swarm the affected tissue by the millions, and are the specific cause of all tubercular lesions. This parasite destroys tissue through ulcerative processes, "and gives off at the same time certain poisonous substances called toxins which give rise to various, and often serious symptoms."—(Knopf.)

According to the classical definition of Koch, it is a minute colorless rod with slightly bent shape, with generally uniform contour and slightly rounded ends. It is quite variable in length and thickness. "Tuberculosis first appears as small nodules in an infiltrated space, these latter breaking down, forming an ulcer which has irregular, soft edges, only slightly depressed below the normal surrounding tissue and covered by granulations which may extend above the surface of the normal tissue. The slough covering the base allows the granulations to peep through, appearing like papillæ."—(Carmody.)

Four fairly distinct types of infectious tubercle bacilli have been demonstrated; the human, the bovine, the avian and the reptilian. Monkeys and apes are the chief sufferers.

The buccal cavity is an ideal incubator for tubercle bacilli, the

requirements being a temperature between 84 and 107 degrees of moist heat, a moderate amount of oxygen, protection from light, and a suitable pabulum containing nitrogen and phosphorus.

The lowest fatal temperature of the bacilli tuberculosis is 103 degrees of moist heat for a period of six hours, and it is impossible to destroy it by any known degree of cold. Gaultier tried alternate freezing and thawing of the tubercle bacillus for a period of several weeks, but it showed no decrease of virulence. Cadeac and Malet found that after four months' freezing their vitality was preserved. Kirstein conducted a series of experiments and learned that dust from library books was found infectious after eight, but not after fourteen, days; powdered sputum alone, after four, but not after seven, days; lint from sputum smeared clothing, after five, but not after ten, days; sputum mixed with street dust, after three, but not after eight, days. Chantemesse and Widal showed that bacillus tuberculosis could live in sterilized water from fifty to seventy days, while Gaultier preserved them for four months in water. They can be destroyed in a test tube by normal gastric juice, but not so in the stomach; it is not the pepsin, but the hydrochloric acid that produces this result. The bacilli are not killed in the stomach because of the varying acid strength and their admixture with food. The experiments of Faulk, Strauss, Wurtz, Cadeac, Bourne, Zagari, and Firranini agree in the conclusions that bacilli introduced into the stomach with food, sojourn too short a time to be killed.

(This article is expected to be continued in the October issue.)

THE MAKING OF A GOLD INLAY FROM AN AMALGAM MODEL*

(Concluded)

BY FREDERICK L. MILLER, D.D.S., WOONSOCKET, R. I.

WHAT I want to lay particular stress upon this evening is the resistance form and the retention form. Resistance form pertains to the flat base, which resists the forces of mastication. One might say, "What does it matter? If I have a deep cavity, surface resistance will hold my filling if the four walls are intact, even though the base isn't flat." In a tooth as frail as a bicuspid, if the seat isn't flat, the filling cone-shaped, it acts as a wedge and is liable to fracture the wall when stress is brought to bear upon it.

* Read at the Annual Meeting of the Rhode Island Dental Society in Prov., R. I., Jan. 10, 1911.

Retention form pertains to parallel walls, steps, pits, etc.
So much for cavity preparation.

Next we come to taking the impression of the cavity. I find that Downie's impression material takes a very sharp impression and find it to be better than anything else I have used, and in order to explain its use, I think it well to take a simple cavity and go through the whole procedure from taking the impression till we have the finished inlay;



ILL. No. 10.—Cavity on labial surface of central.

so we will take this cavity, No. 10, on the labial surface of a central tooth.

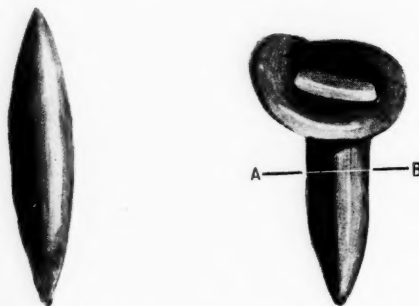
Heat the impression material and form it something like this illustration (No. 11) about three-fourths of an inch long. Chill under the faucet and heat the extreme point. Do it quickly so that this point will be very soft, while the underlying body remains hard. Force it into the cavity and chill with cold water, or air.

Remove it carefully, wash dry and examine through a magnifying glass, to see that there is no foreign material attached, also that the lines are sharp. It should look something like No. 12. If it is not sharp enough to suit, being sure that it is perfectly dry, heat the end of a piece of sticky wax and when ready to drop, allow it to fall on the face of the impression and immediately force into the cavity again. Chill, remove, wash, and examine; you ought to have a very sharp impression.

Should this cavity extend under the free margin of the gum you should use a piece of sheet metal to carry the compound on. For this purpose I use White's matrix metal, although I believe there is on the market an alloy of aluminum that is not as springy as White's metal.

With a pair of half-round pliers form this metal to fit approximately the labial surface and trim the end to correspond to the gingival margin like illustration No. 13.

Attach a small amount of impression material to the concave surface, on the end that is trimmed to fit the gingival margin and cool it. Heat the outer surface of this material and holding the metal at right angles to the face of the tooth (concave surface facing down), press the free margin of the gum above the cavity, then press down onto face of the tooth. When this is chilled and removed we have an im-



ILL. No. 11.—Form given Downie's material before taking impression of No. 10.

ILL. No. 12.—How No. 11 looks after taking impression of No. 10.

pression of the cavity with all the lines sharp and enough of the surrounding tooth structure to work from.

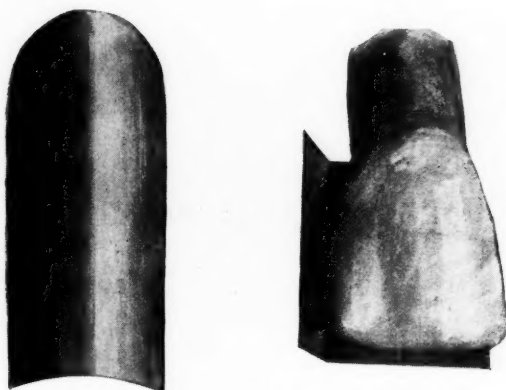
In an approximal cavity extending from the lingual but not reaching the labial surface, like illustration No. 3, I would bend the metal at right angles as you see in drawing No. 14. Attach the composition and proceed as before. The illustration I think tells the story.

For cavities in the approximal spaces of bicusps and molars we would form a box of this metal like illustration No. 15. The surface of the box that corresponds to the mesial surface of the tooth should be trimmed to fit just under the free margin of the gum (B), while the occlusal surface rests on the cusp remaining, the cusp acting as a stay when the impression material is forced into the cavity, thereby preventing injury to the gum; any composition on this side of the box (C) if distorted in removing the box, does not affect the impression. It is well to press with a flat instrument before material hardens on this part (B) to be sure of having this sharply copied, for this is the part of the inlay that is apt to be defective.

In approximal cavities of the incisors and cuspids extending from lingual surfaces including the labial, when all surfaces of the tooth

require reproduction, we would form the metal into the right angles like No. 16, allowing the two ends of metal to extend about one-eighth inch beyond the labial surface.

Take the impression as before from the lingual surface and after chilling cut away all of the impression material that extends beyond the labial surface, so that the impression can be withdrawn, remove and cut away to a line beyond that part that represents the labial margin of the cavity: wash and place back onto the tooth. Holding this impression with one hand, heat the end of a piece of Downie's material and press the second piece on the labial surface of tooth, being



ILL. No. 13.—Sheet metal shaped to take impression of gingival cavities extending under free margin of gum.

ILL. No. 14.—Form of matrix for taking impression of No. 3.

sure to take margin of cavity and allow material to flow over these pieces of extended metal. Chill, remove the outer impression, then remove the one from the lingual surface, dry and place them in apposition, the extended metal serving as a guide, and fasten them together with sticky wax. No. 17 represents the labial impression, the metal B fitting into the slot A.

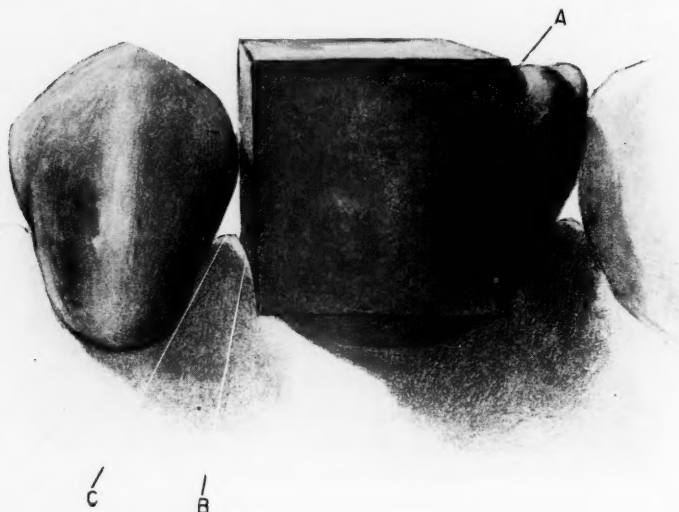
I have given these few illustrations to show how this work is done. Each one must use his ingenuity as the individual case presents itself.

To refer back to the first impression (No. 12) it is cut off here (AB) and if we were to use any of the other cases trim the metal close to the composition. Having mixed a batch of plaster thick enough to stand on a bench, form a pyramid about one inch high; place the impression on the plaster, face up, and press into the same until the top of the impression is about one-fourth inch from surface of plaster; allow plaster to set. A cross section of the imbedded impression is

shown in No. 18. I use a pair of pliers to push the impression into the plaster, for this gives me two surfaces to bear upon, thus preventing the tilting of the impression. Be sure that the impression is dry and don't let any of the plaster flow over same.

It is very important to mix the amalgam the proper consistency. It should be so thin that, should it drop upon the floor, it would spatter. I think that any cheap alloy will do.

Tap or rub this thin alloy carefully all over the impression without using undue pressure, using small amalgam pluggers for tapping, or



ILL. No. 15.—Box form of metal for taking impression of cavities in approximal spaces of bicuspid and molars.

cotton or spunk for rubbing. When cavity is half full use plugger with broader surface until completely filled. Use thumb or finger to express excess amount of mercury; as long as finger covers all of the amalgam you can press as hard as you see fit. Allow the amalgam to set.

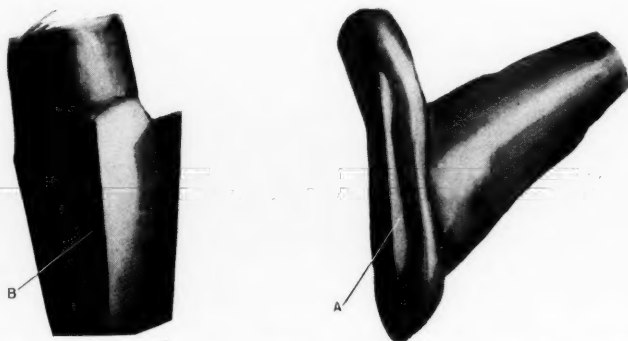
After the amalgam has set, soak the plaster in water and cut away from impression and amalgam model. Then heat the Downie's material and remove same from the amalgam model, which ought to leave a model that is as good to work from as the original tooth.

In simple cases where there is no contour, use a quick method that need not take over ten minutes to complete, as follows: Seat this amalgam model in dental lac in the ring that comes with White's swager and press into the cavity a piece of platinum of suitable size 1/2000 of an inch in thickness; adapt it without taking too much pains,

to walls of cavity with cotton or spunk, held in ball-pointed pliers. Insert the ring in swager and swage with Melotte's mouldine.

Remove from swager and burnish out the folds, then swage again. If the platinum does not tear, remove carefully from cavity and coat the whole under surface with whiting and water and the cavity surface to within a line of the cavity margin.

Lay the matrix on a soldering block and fuse small pieces of scrap 22K. gold into same, using but one piece at a time and don't use any flux, for this is what causes pits.



ILL. No. 16.—Metal bent to take impression of all surfaces of central, showing a three-quarter labial view with metal in place.

ILL. No. 17.—Downie's material after impression of labial surface of No. 16 has been taken.

If the tear in the platinum extends to margin discard it and try it again.

If the split does not extend to margin cut a small piece of platinum large enough to cover tear and swage same over the break. Fill the matrix with sticky wax, remove from model and invest in some quick-setting investment material, boil out wax and proceed as before, fusing small pieces of gold into the matrix.

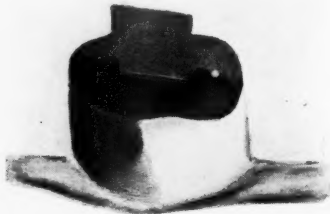
Where there is a contour to be restored we must resort to the regular way of casting. Having previously wet the model with water, melt the wax in a spatula, place a drop in the cavity of the amalgam model and with a small hot instrument make the wax sizzle against all surfaces of the cavity: then build up wax with spatula to the required contour. Chill the wax and with a spatula add a line of wax all round the margin, to make sure that the same is completely covered.

Heat the end of an exploring instrument and insert it into wax, withdrawing and inserting a few times until the imprint of the point is left in the wax. Chill the instrument and again insert into wax. Re-

move the pattern from the model, then reseal the same and remove the exploring instrument; attach the sprue wire and place on the former, being sure that there is no play between sprue wire and former; should there be play between these two tack them together with a small amount of wax.

Before studying dentistry I was a so-called lithographic artist and among other things we were required to have a fair knowledge of drawing and a perfect understanding of color; we did considerable water-color work. This being done on Watman's cold-pressed, water-color paper.

The first few washes acted very badly. The color would pull away in parts and settle in other parts, the same as ink does in writing on



ILL. No. 18.—A cross section of No. 12 imbedded in plaster.

oily paper. By mixing a small amount of ox-gall with the color, the first washes work equally as well as those that come after the color and paper become compatible.

Water and wax are incompatible. Any combination or compound where water enters as a constituent, such as an investment material, when brought in contact with wax shows incompatibility. By painting your pattern first with ox-gall, then applying the investment material you will find that the investment instead of bridging over and dragging seems anxious to run before the brush apparently wanting to enter every interstice. It also has a tendency to push the bubbles to one side which if allowed to rest upon the wax would be reproduced by protuberances on the inlay and this would prevent its seating. You will also find that after using ox-gall you can mix the investment material a great deal stiffer than you have been in the habit of doing. This stiff investment will, of course, expand and contract less, producing an inlay that fits the cavity much better than it would if a thin investment was used. I believe that the reason the inlay I passed around this evening fits so well is due almost entirely to the use of ox-

gall. Coat the pattern with ox-gall and dry by touching with a piece of blotting paper, then mix the investment material and mix it very stiff. For the first investment I use I. D. L. Have the pattern covered to a depth of at least an eighth of an inch all over. Allow it to set, which takes about two minutes, so that the second investment material won't disturb the first. Adjust ring on former and mix the second investment material. For this I use material put up by Rouge Chemical Co. of Malden, Mass. The reason I use it is because it is cheap, sets quickly, and does the work satisfactorily. Fill the ring and allow it to set, which takes about ten minutes, then place on the gas stove. Heat this slowly until wax melts out, then turn flame up and heat the investment material and ring until they became very hot, for I always use a hot investment to cast in.

This is contrary to Dr. Taggart and his followers. He not only uses a cold investment, but at least five dwts. of gold, whereas I use much less. We must remember that Dr. Taggart has nitrous oxide for fusing and most of us use ordinary illuminating gas and cannot get the intense heat required to make the gold liquid enough to reproduce sharply the fine modeling of the wax pattern. As long as we haven't this intense heat we must compensate by using less gold and a hot investment to get the same result.

While the investment is heating I purify the gold, always using scrap 22K.

Let me say this unqualifiedly. *Never attempt to make a gold inlay without first purifying the gold.*

There are other methods more thorough than the one I use, but for all practical purposes this one answers and takes but a short time to accomplish.

Place gold on a discarded plaster model, fuse same and dust equal parts of potassium nitrate and borax over it. Melt gold again and dust over powder, continuing this operation until almost the moment you direct the flame into the gold. The outer surface boils, while the underlying body of gold apparently is still hard, the last procedure being the dusting of powder over the gold; chill and boil out in acid.

Place gold in ring, after ring has been carried to the casting machine, and use a big flame to melt gold, for remember we must keep the investment as hot as possible. After the gold has become molten it is first of an orange color, then we have a ring somewhat like the moon. This gradually turns to a decidedly bluish hue and if carried considerably further, the gold boils. This would be carrying it too far, so the time to use the plunger is between the blue moon and the time it would

boil if the heat was kept up; when this time arrives, pull plunger down and hold it one minute before releasing same.

I chill the gold immediately, boil out in hydrochloric acid, and put one drop of hydrofluoric on the cavity surface.

Try inlay in model and if it binds anywhere the mercury of the amalgam will mark it, showing exactly where to trim.

After it has been seated remove and cut away the gold representing the sprue wire.

Should there be a pit, caused by escaping air, paint the whole inlay with whiting and water to within a line of the pit margin and flow 22K solder in pit.

Should a part of margin be defective, hammer a piece of gold out very thin and lay on the model where inlay is defective, seat the inlay and burnish the gold plate to model; attach plate and inlay with sticky wax. Remove both together, invest in a quick-setting investment material. Boil out wax and solder. Seat the inlay on model and trim down, always avoiding the margins, for this feather edge must remain until after inlay has been cemented in tooth. After it has been trimmed down burnish the margin thoroughly to model. Place inlay in tooth and burnish the margins to the same. Remove and roughen.

I believe that a good fitting inlay is less liable to be dislodged when the cavity surface has a bur turned up all over, than by cutting a groove around it, for this bur makes it fit so tight that it must be driven to seat it.

Now polish, avoiding the feather edge of margin.

Wash the inlay with chloroform, also the cavity in tooth, dry thoroughly and wipe over each, the liquid of cement to be used. Dry again and mix the cement as stiff as possible. Apply cement to the cavity and inlay and drive inlay to place. Burnish margins immediately, expressing the surplus cement. After the margins have been burnished, I don't care how soon the saliva reaches it. Finish after cement has set.

THE earliest use of false teeth, made of hard wood, is attributed to Aaron, the Hellenic Jewish physician, of Alexandria, who made teeth of acacia wood, and secured them in position with gold or silver wire. His date of existence is the fifth century A. D.—*Ashe's Quarterly* (from *American Dental Journal*).

"ONLY A COUNTRY DENTIST"

BY ONE OF THEM.

A FEW weeks ago I attended a dental convention. I do this once a year, not because of any particular benefit I derive from the papers or discussions, although I do enjoy hearing the "leading dentists" air their eloquence. The poor fellows don't get many chances to juggle with the English language, and who could be so cruel as to choke them off when they do get a chance at an audience that can't get away. Once in a while some chap who isn't in the elocutionary syndicate gets the floor and makes some practical remarks, and asks some pertinent questions. Such cases are rare, however. At the last convention I attended, a dentist got an opening and gave a short talk that fairly bristled with new ideas. Everybody sat up. It was a good deal like heresy for any one to introduce live topics at such a time. When he sat down the applause was spontaneous, not perfunctory.

What roused my wrath was to hear one of the "Old Guard" whisper to another, "He's only a Country Dentist, you know," the inference being that a country dentist was a semi-educated being, coming out of the woods once or twice a year in search of knowledge. I'm "only a country dentist, you know," myself, and, while my vocabulary isn't as extensive as that of these once-a-year essayists, when it comes to common-sense and practical ideas I don't ask for any handicap.

When I was younger I had what my good old father called "highfalutin' notions." I was a husky, able-bodied chap, and he thought I would make a good farmer. I think so now; but I didn't think so then. A profession was my idea. Some kind of a profession, it didn't matter what. For some unexplained reason my mother loaded me down with a big name. Jerome Bonaparte Brown. Sounds big, doesn't it? But the boys at school called me "Jerry." That was common, so when I went away to school, I signed my name "J. Bonaparte Brown." I thought that would look pretty grand on a nice sign. Alack, and alas! My fellow-students called me "Boney," and "Boney" it was to the end of the chapter. Maybe that's why I came to be "only a Country Dentist."

It was quite a long time ago that I passed out of dental college and was thrown on the mercy of a cold, unfeeling world. I had a fair working knowledge of all branches of dentistry, most of which I got from my preceptor, not from college. But I had an overweening confidence in my ability to make a great reputation anywhere, under any circumstances.

Of course I wanted to commence in a big city. Every young dentist does. The money question! There was the rub. I didn't have enough money to fit up a city office in a style that matched with what I considered my caliber as a dentist. Oh, I was conceited, all right!

Much to my regret I was forced to locate in a country town. I intended to stay just long enough to earn money to go to the city. That was a good many years ago, but I am in the same place yet. And I like it. No big city for me. I am reasonably prosperous, distressingly healthy, and as nearly contented as a dentist has any right to be. I own a little cottage on the edge of the town. It has a nice lawn in front and a good garden in the rear. I've a dandy road horse and a neat turn out. I don't owe a dollar, and have a good bit of money safely invested. Everybody in town and about town knows me. They call me "Doc," but they like me and respect me. When I first opened my office here I put on airs. I felt superior, but I soon saw the foolishness of it and became a good mixer.

I'm a citizen of considerable importance here. In a big city I'd be a very small drop of water in a very large bucket. Why should I wish to go there? I don't. Success in the city comes only after a long, hard fight. Success in a good country location can be won by any young dentist who has perseverance and "horse sense." The latter is essential. I don't mean to say that anybody can succeed in a country practice. I mean that other things being equal the country dentist is more likely to succeed than his city brother, and his road to success is less stony and less painful. The country dentist must be a good all-around man. He gets all kinds of experience. He must do all his work. Laboratories are too far away. He doesn't spend much time discussing fine-spun theories, but he reads, and thinks, and practices along the lines suggested by common-sense and it's a ten-to-one bet that he makes fewer mistakes in practice than his city contemporary.*

I know all about these "country dentists" because I'm one of them. My income isn't as large as that of the country dentist who wrote in the February DIGEST of his \$6,000 practice, or else my imagination isn't as robust, but I am pretty well satisfied. Between you and me the country dentists are the real backbone of dentistry. They are doing more toward educating communities in the proper care of their teeth and incidentally in general health, than they get credit for. The country dentist is nearer his patients. He meets them in his daily life, and is consulted very many times outside his office. It may be bad taste, and very "unethical" to "talk shop" at such times, but city usage and country usage are vastly different. Mrs. Brown meets him and says: "Oh, Doctor, I'm so glad I met you! Johnny is getting his sec-

ond teeth and they are coming in crooked. What shall I do?" That means a little talk with Mrs. Brown and an appointment for Johnny. Mrs. Green wants to know "how to keep Sarah Jane's teeth from turning black," and Mrs. White is also in search of dental information. No, these people aren't trying to get free advice. They consider their dentist as the only authority worth having on dental subjects. They also regard him as a friend and a neighbor. They would do him any favor in their power, and they give him all their work, and pay him promptly. If the country dentist is the right sort, he has a great influence in the community; only second to the old family physician.

Ethical or unethical, I'd rather be "only a country dentist," respected and recognized as a social equal by all my patients, than a city dentist considered by many of his patients as a higher grade mechanic, or an upper-class servant, barely recognized, if recognized at all, when met outside his office.

THE PASSING OF THE DUMB

IMAGINE living in a world of eternal silence, where sound is something as inconceivable and beyond understanding as sight to those born blind! Yet such is the fate of one child out of every fifteen hundred. That these deaf children need no longer be segregated in institutions and denied the pleasure of home ties and associations has been thoroughly demonstrated by a remarkable public day-school system of oral work.

When the Board of Education of New York City opened this school two years ago it was looked upon as an experiment. Now it is recognized throughout the United States as an unqualified success. From an enrolment of forty-eight pupils in 1908 with ten classes it now has nearly two hundred pupils and nineteen classes, including shop-work, cooking, painting, drawing, and sewing. The first class to be graduated will be that of 1911. It is the aim of the school to qualify the pupils to enter the trades and professions and to be self-supporting.

Statistics of the last year show that there are 12,000 deaf pupils in various schools in the United States alone. That the majority of these are taught by oral methods and read the lips perfectly, proves that they are not "dumb" on account of lack of hearing, but lack of instruction. The child usually designated as "deaf and dumb" has as perfect a vocal organization as the speaking child.—LOUISE E. DEW, in *Harper's Weekly*.

WHAT THE MARION SCHOOL SQUAD DID FOR ME

THREE ESSAYS BY MEMBERS.

Here is the story of benefits received, as it is told by three of those who received treatment in the "Marion School Squad." It is to be noticed that the children think most of the physical benefits. That is natural, because these underlie other benefits.

Surely no one who reads these simple stories can fail to realize how important this work is, from the viewpoint of those who profit by it.

Rightly seen, it is just as important from our viewpoint.—EDITOR.

BY LILLIAN GOTTFRIED.

As a member of the Marion Dental Class, I am very glad to write the experience of the work I have been given, beginning with May 18, 1910. I entered this class as an unhealthy and restless girl, my mouth having many decayed teeth, and my gums affecting me with sore throats and headaches.

I suffered great pains with my teeth, and was the happiest girl on earth when I learned that I was getting a free chance to have my teeth fixed and my mouth and health taken care of. At that time I could not afford to have my teeth fixed by a private dentist. That was the kindest thing a person could do for me. I never have dreamed of such a thing. I had about the poorest set of teeth in this class, and of course I had to suffer three or four months to get my teeth in good shape. This was a great pain, by the way, but it never was as bad as a toothache, which I would get so often.

Just a year from now, I have had a bad complexion, and was disgusted in all sorts of ways. I have been disagreeable to all my friends, and did not know what the end of me would be. Finally I began to realize all my faults, as my teeth were being fixed one after another. My health had been improving right along. I carried out the instructions that were given to me by Dr. Ebersole and his assistants. I had taken many breathing exercises whenever I would get out of doors. This made me strong and happy. I was healthy, and free from troubles. I showed up in brightness, and my parents and friends noticed that I had changed in every way. My parents have never believed that an unhealthy mouth would make an unhealthy child. After I began to realize my faults, I have been faithful with my tooth brush and powder, without any one urging me to do so. After these results, I have turned a new leaf in my life, and many and many people are doing the same thing. This will also change the whole history, and not many years from now, all people of the world will be doing the same thing as the Marion Dental Class has been doing.

BY BEN DIMENDSTEIN.

As a member of the Dental Class of Marion School I feel proud to be able to express in words how much I owe to the doctors for the good they have done me.

I frequently had toothaches which restrained me from chewing my food well, therefore causing stomach trouble. I also had headaches, whose source came from my bad teeth. Often while in school my eyes would begin to hurt so that I could not continue my studies. When my teeth were first examined by the dental clinic they were in as bad a condition as can be imagined. After the first treatment by the dentists I began to feel better; gradually the toothaches began to pass away. As soon as I noticed the improvement I began to take more interest in my teeth. I cleaned them every day without fail. After a few more treatments by the dentists, the toothaches passed away entirely. I soon began to eat with a better appetite, and, being able to chew my food well without being in fear of a toothache, the stomach trouble also passed away. I began to take more interest in my school studies; I would be more attentive to my teacher, and could understand my lessons thoroughly, which put me at the head of my class.

A short while before I entered the Dental Class, I took part in a district athletic meet. I entered in the 50-yard dash, being unable to qualify in the standing broad jump. In this I could not finish with the winners.

One year later I entered in this same meet, and finished first in the standing broad jump and first in the 50-yard dash, winning ten of the sixteen points made by the school.

I am very glad that I do not have to attend summer school, as I am well up in my studies.

For all of these things I want to thank the National Dental Association and wish them the best of success in their undertaking.

BY LILLIAN COHEN.

The advantages derived from the recent improvements of having dentists care for the teeth of the children by The "Dental Class," are numerous.

The above-mentioned subject has proven to me that in caring for the teeth, you not only benefit the teeth, but help along the vital organs of our body.

Below is a list of how it has helped me.

1. In taking care of and beautifying my teeth.
2. In making an odorless breath.
3. In making my thinking capacity work on a larger field.

4. It has put my stomach in a better condition to that which it has been before, which was always inclined to be out of order and cause much pain and distress after each meal. I enjoy my sleep much better.
5. It has taught me to digest my food properly.
6. It has caused me to change my complexion to a redder hue.
7. It has taught me to take more care of my toilet, which has heretofore been carelessly neglected.

My eyes have always been in a bad condition, and now they are getting along very nicely, and I attribute this cause almost solely to the care of the teeth.

I think this method now being experimented by The "Dental Class," has proven a great success, especially in my case, and I am also very glad that I was one of the children to be entered into this class.

I think that if I had not been in this class I would not be in the condition I am to-day, and I think if this work is taken up by all the schools in Cleveland, it will be a great benefit to humanity.

Hoping that this letter will show that your efforts have not been in vain, I remain,

Your obedient patient,

LILLIAN COHEN.

P. S.—My father and mother thank you most heartily for the efforts and devotions shown toward me.

DIAGNOSIS OF DENTAL PAIN

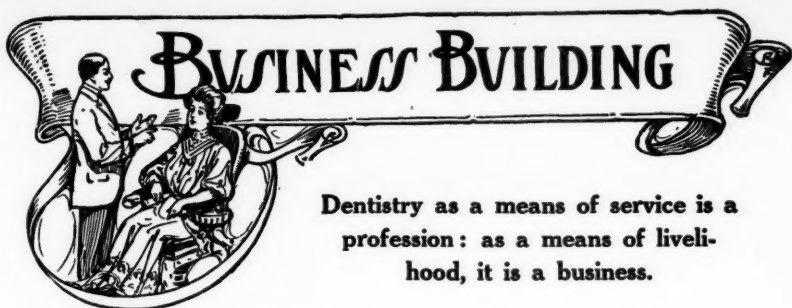
BY L. POND, D.D.S., NEW YORK CITY

Nerve Pain

Arises suddenly.
Terminates suddenly.
Is not continuous.
Is chiefly non-localized.
Much neuralgia.
Tooth always sensitive to thermal changes.
Percussion or pressure does not necessarily cause pain.
Tooth not raised; not loosened.
Tissues around not inflamed; not tender on pressure over row.

Pericemental Pain

Arises gradually.
Terminates gradually.
Is continuous.
Is distinctly localized.
No neuralgia.
Tooth not sensitive to thermal changes.
Percussion or pressure causes much pain.
Tooth raised and loosened.
Tissues around inflamed; tender on pressure over root; in chronic cases tissues thickened.



**Dentistry as a means of service is a
profession: as a means of liveli-
hood, it is a business.**

WHAT BROTHER BILL HAS DONE FOR US

THIS paper, written by the Secretary of the Olean Dental Society, Olean, N. Y., and authorized by the Society, is a voluntary contribution, and is sent with the hope and desire that our brother practitioners in towns and cities where no dental society exists, but who have been awakened by the earnest appeals in "Brother Bill's" letters to a feeling of longing for fair and square dealing and the promotion of a better business at more lucrative fees, may be somewhat encouraged to take the step so imperative to their success, Organization and Brotherliness (a getting away from fear and foolish jealousies), that has meant so much to us, the inspiration for the organization of which was born to us from the pen of "Brother Bill."

Progress is the law of Science.

Dentistry, as practised to-day, is a profession and an art.

The study of the progress of dentistry is a Science.

From the early days when our profession was followed as a trade up to the establishment of the first school for the teaching of the principles and practice of Dental Surgery, we shall consider as the first progressive step in the development of dentistry.

The second progressive step has been the production and bringing into use of the present-day equipment of our offices, together with the splendid results obtained by scientific research into the uses and application of materials for the restoration of the teeth, the perfection of a thorough system of dental education and the enacting of laws for the protection of the Profession; the formation of dental societies throughout the civilized world for an exchange of ideas and mutual benefits, and last but not least, the present movement along the line of prophylactic dentistry, which must eventually establish us as a body endeavoring to serve the public by a method of prevention rather than a cure for dental caries.

The third step, and one in which our profession, like others, has been grossly deficient, is the careless manner in which we have regarded

our greatest need, namely, placing the results of our professional labors, aside from the benefits to the patient, upon a practical business basis. Aside from the few who are men of natural executive ability, a great number of our practitioners have come to old age with nothing saved for their "rest days," dependent upon their children and relatives for their provision and home, having devoted their lives to hard work, loving their daily practice, enjoying perhaps the while a goodly income, and too often persuaded by the "chance-of-your-life-investment man" into foolishly and thoughtlessly separating themselves from their hard-earned dollars.

From across the Boston Common came a "Brother Bill," for so he signs himself, who saw a great need among his fellow-workers. Who realized that the members of his profession were not enjoying to the full the results of their toil. That they were losing much of this world's goods and pleasures by working at odds with their brother dentists; that they were being held down by that great task-master "Fear," and seeing these things, he had compassion upon them and endeavored to help them by a series of letters written to arouse them to an understanding of the grandeur and power with which their profession could reward them; that by working in unity for Justice and Right, and by standing firmly for *all* that they knew was Right, there would result a better feeling, more brotherly love, better financial ends, a lifting of the dental practitioner from the coarse and sordid fear that perhaps he would lose to a brother practitioner some of his patients because his neighbor charged a little less, whether or not he gave as good work for the fee charged.

"Brother Bill" has clearly shown us that we must be "the master" instead of "the mastered," that we are not compelled to follow in a beaten track because it has been dignified by age, that business success is within the reach of every man, and as much for one as for another.

It is true that a year is but a short space of time for our little band of workers to show, to any great extent, much in the way of conclusive proof in the working out to a practical end this splendid "Doctrine," but being loyal "Brotherbillites" we are willing to pass along the tale of our results for what good or inspiration you may find therein, and therefore we give it here.

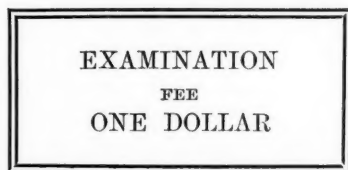
Up in the Alleghany Mountains is a city of about 20,000 inhabitants, and also a number of dentists, who, in the Spring of 1910, after each man had been reading and profiting personally by that admirable collection of letters on the business side of our profession, which

"Brother Bill" had written, came together and organized the Olean Dental Society and made our plans to profit as a Society by his suggestions; in other words, we realized that if the "Big Idea" was beneficial to one it must be more so to all if we worked in harmony to promote first our own business interests and, secondly, fair treatment and the education of the public to an appreciation of good dentistry, well done, at good prices, and we believe that every man in our city could charge the same rates and "deliver good goods," the while keeping peace in the "family of patients."

We said to ourselves, "we are all good workmen, and from now on it shall not be a question for the patient to decide of 'who does work the cheapest,' but one of, 'which man do I like the best and want to do my work, since all charge the same?'"

We framed up a chart on which was illustrated every possible dental operation for which a charge could be made, and then placed opposite each illustration the charge agreed upon—each member having a chart. Of course this result was not arrived at until a general discussion had been held pro and con regarding each charge, some thinking "this too much" and "that too little," but always striking a happy medium.

We realized that the giving of estimates and free examinations not only lost much time to us, but aided the patients in "shopping," and accordingly we determined to place in the offices of our members this sign:



with the result that when a patient had paid a dollar to know *how much* it would cost to have his mouth put in order and how many cavities he had, he seemed to have lost his desire to seek other professional opinions on the same questions. Should he return and have the work done his examination dollar is placed to his credit.

In some instances we found that we were able to double our fees, as, for example, in the case of extraction from 50c. to \$1.00, which, in the course of a year amounts to considerable, added to one's total income, and we have eliminated the practice of free extraction in cases of plate making.

We realized that there must be an interchange of about 12 per cent of our patients annually, and so from the personal feeling of former days that a Brother Dentist has taken away some of our practice we

now found ourselves reporting openly at our meetings that this patient or that one was but a "shopper."

We also find it pleasant at our monthly dinners, which we always have at the best hotels in town, to exchange the patients' remarks and criticisms of us and oftentimes we find a deal of truth and perhaps less poetry in these remarks by which we are able to profit at home.

We established during the summer a closing-at-noon on Saturdays, which every man fully appreciated, and we also had a jolly annual outing with a splendid dinner, at which the ladies were present.

One cannot appreciate the freedom of such good fellowship as we enjoy unless one has experienced it, but it is so much easier to be open and square and know that your neighbor is also, that we could not be induced to return to the old way.

The formation of our Society, conducted along "Brother Bill lines," sounded in us a chord of good feeling and square dealing with each other, and has awakened the people to the fact that the Olean Dental Society is a factor in its public life to be reckoned with, and which has brought about a sense of respect and admiration for the dentists which even other local professional men had not awarded us.

The examination of the teeth of school children was a problem that one dentist would hardly feel warranted in promoting alone, but when it could be done as a Society it assumed a different aspect, and eventually an invitation was given our Society to have a Committee meet with the Board of Education and discuss this all-important subject, and we feel hopeful that in another year it will be adopted by the Board and become a permanent fixture in the public school work of Olean.

In the early part of last December we invited the local Medical Society to banquet with us and spend a social evening getting acquainted, for it seemed to us that if the medical men could personally meet and know the members of our Society it would produce universal harmony. The grand result of that dinner was most unexpected, for both Societies turned out strong, and every physician to a man spoke most considerately of our profession and congratulated us upon our progressive ideas, and it has become a fixed plan to have three similar dinners each year.

One could not help seeing how much better off we are individually and as a body after one year's work, and it is with a feeling of appreciation and gratitude to you, "Brother Bill," who have not only given us the idea, but the inspiration as well, that we send this report and hope that it may encourage the men of other towns and cities to do likewise.

THE OLEAN DENTAL SOCIETY,

A. M. WILBOR, Secretary.

SEASONABLE SWINGS IN PRICES

BY HENRY HALL, NEW YORK CITY,

Author of "How Money Is Made in Security Investments."

A TOPIC of interest and importance to all, who have capital at stake in stocks, whether they are investors or speculators, is that of the effect of different seasons of the year upon prices.

In no other branch of the subject are cause and effect more clearly demonstrated than in this. It was long a mystery to many people why prices should soar at certain seasons of the year, and should slump heavily at others, general conditions remaining unchanged to all appearances. What is there in the nature of January, when the Northern snow cap spreads down all over the States, and in the nature of August, when tropical heat drives ice and snow back where they belong, to cause a rise in stocks in both cases? On the other hand, why should February or March, at the end of winter, or September, in the Fall, two radically different kinds of months, witness a break in stocks in the majority of years? The facts are patent, and there must be some reason for them. There is indeed a reason, and it can be explained, and is worth bearing in mind.

First, what are the facts? Take the last 21 years:

January: An advance in stocks from December's prices, in 16 years. A decline in 5 years.

February or March (it has been February lately): An advance in 12 years, followed in some cases by a decline. A substantial break in 9.

August: Higher prices, often a genuine boom, in 17 years. Lower prices than July in 4.

September: Up in 7 years, and then occasionally down. Down, anyhow, in 14 years.

It is only within the last fifteen years that attention has been particularly drawn to this phenomenon in the swing of prices. A cursory examination of the records shows that this peculiarity of the stock market extends backward, even for a long period previous to the 21 years tabulated. When a great bull campaign is in progress, sometimes when the year is one of business depression, the seasonable swings are very rarely omitted. Great booms in bull campaigns are more apt to culminate either in January or August, than in any other months of the year. And whether the spirit of the times is in favor of security prices, or against them, the Spring and Fall breaks come along with almost unbroken regularity. They may be deferred a month or so sometimes, owing to technical conditions in some particular year, but that is all. Now that it is understood, that there is a sound reason for

the seasonable swings, Wall Street speculators operate, for the sake of profits, to help them materialize; and seasonable ups and downs are among the most cherished traditions of the Street.

I know of more than one man of moderate means, who has accumulated a little capital and can afford not to speculate, in the proper sense of the term, but who wants a good income upon his money, not less than 25 to 30 per cent. a year, who governs his action entirely with reference to seasonable swings in prices. This is the particular "system" of such men. It is good system, provided that the capitalist remains in touch with the spirit of the times and is conversant with the broad trend of the market, and does not allow his "system" to override his discretion. In a year like 1907, for instance, when a first-class panic was in progress, it would not have done to buy in February, in the hope of a big rise into August. Common sense would have dictated an entirely different policy. In such exceptional years, the course of prices is like the flight of the car on the giant coaster, "The Chase Thru the Clouds" at Coney Island, up a little after each plunge, then down considerably more, and ever down, until the bottom is reached, which is usually in September or October. In panic years, it is best always to wait for the culmination of the smash. In normal years, and years of recovery from a panic, the seasonable swings follow each other like the methodical movements of the pendulum of a big clock; and the capitalist who wants 25 per cent. or more on his money, can get it by following this system. A good plan in such cases is to trade only in stocks, which have earned 10 per cent. in the previous five years on the average market value of the stock (not on the par value, but the market value). They are the ones which are the most certain to rebound vigorously after every slump; and they are usually the ones, which operators most delight to smash for the time being, in order to pick them up again lower. There is lively action in the majority of such shares.

The rise in January and August is primarily due to the immense disbursements of interest and dividend money at those periods. Corporations have so arranged their affairs that the aggregate of payments to their security holders in January and July is much larger than in other months of the year. It is almost amazing how the January and July disbursements have grown within the last ten years. They amount to twice as much as formerly, ranging between \$230,000,000 and \$250,000,000 in each of those two months. This, of course, is largely due to the immense volume of new securities, which has been created in the ten years referred to, but also grows in part out of the fact that disbursements are made on many stocks and some bonds now which paid nothing a few years ago.

Institutions, corporations, and individuals all appear in the market at the time of each of these enormous seasonable disbursements, as investors to a certain extent in securities. They must do something with their surplus money, and they put a considerable part of it into bonds and stocks. That is the starting point, the foundation, of the booms of midwinter and early Fall. If you knew that 20 men would have a hatfull of money coming in in January, and were going to buy corner lots in your town at once, and if you had a few corner lots for sale, you would certainly make the 20 men bid for your holdings. Competitive bidding would alone cause a rise in price of corner lots; and if you knew of any way to get hold of the whole floating supply of such property, so that no one could buy unless he came to you, where would the price of them go? This is the substance of the explanation of the stock market booms of midwinter and early Fall.

Speculators and pools prepare for these upward swings in prices long in advance, picking up stocks on previous breaks and holding them patiently until investors rise up and take them off their hands. Meanwhile they put prices up. There are usually enough people and institutions to buy to make it a profitable operation for the pools. Individuals, at any rate, cannot always buy on the breaks. They must wait until their surplus income has actually come in and been deposited in the bank. They have to pay higher prices for their securities in consequence of the delay.

The capitalist, who is operating for the seasonable swings, already has his money free. He has sold out on a previous substantial rise, has made a good profit thereby, uses that money to live on, and then waits calmly for the inevitable decline, perhaps two or three months, when he repurchases his stocks, and holds them for the next advance.

The break in prices in early Spring and in September have, in most years, originated in the rise of interest on call loans. Other influences are effective, but money almost always plays a part. Stocks are exceedingly sensitive to money conditions. An immense volume of them is always carried, in New York especially, by means of funds borrowed from the banks, the shares themselves being deposited as collateral security for the loans. All stocks must be paid for by the purchaser in cash to the full amount; and the general run of speculators invariably make their own cash go as far as possible by putting it up as margin and securing the rest of the sum required from the banks. A considerable rise in interest rates frightens them. The expense of carrying their load of securities is increased, and there is always the danger, a real one, that the banks will call in their loans. A borrower would be obliged to sell them in any case compulsorily, without standing on the

order of his going, and whether he should make or lose thereby. To avoid being "called," and anxious to sell theirs first, a good many operators sell out anyhow when interest rates rise; and down goes the stock market.

The hardening of interest rates in the Spring and Fall is normally the product of farming conditions. Plowing and planting, the purchase of fertilizers, and the hiring of farm labor in the Spring, create an active demand for ready money at that season of the year. New York is always obliged to send many millions of money to the grain and cotton country every Spring to finance the initial stages of preparations for the year's crops.

In the Fall months, especially in September, a far larger volume of money goes West and South to pay for harvesting and shipping the season's rich yield of "wealth from the ground." One sometimes hears that "this year" the West and South are prepared to finance the harvest themselves. The popular inference from that statement would naturally be that New York will not be called upon "this time" for ready cash. There never was a greater fallacy. New York has to stand the brunt every time simply because the Western and Southern banks always have millions of idle money, deposited in New York. While they are merely calling back in the Fall their own money, nevertheless the same practical result follows. New York has to send anywhere from \$30,000,000 to \$50,000,000 of actual cash to the great harvest regions from August to October. This is always a bother and frequently the cause of money stringency in New York. Interest rates rise; and again we have the familiar selling of stocks, with the consequent break in prices.

Both in Spring and Fall there is an additional influence operating in favor of a break. Pools and speculators, who have sold out to the public and institutions on the previous seasonable swing upward, want their stocks back again for the next campaign for higher prices. All the tricks of the trade are resorted to, to get the market down. It might be Judge Gary's "open war in the steel trade," in February, 1909 (a war which boomed the steel business immensely and sent stocks soaring afterward). It might be the September election in Maine in 1908, which was made to appear as threatening a political overturn at Washington, an incident which frightened nobody who kept his head. It might be a San Francisco earthquake, an event which, serious as it was, afforded no real excuse for the tremendous slump of May, 1906. Unless the big men wanted the market to go down for their own reasons these incidents would not have led to such a crumbling of values at the time. If there is no tangible reason for a break in Spring and

Fall, then a fictitious one is created. The main point is, that the two seasonable breaks we are discussing are always due to positive reasons, and they occur with great regularity in normal years and years of recovery after a panic.

I will not attempt to say positively what stocks will do in the Fall of 1911; but at the moment of this writing the market seems to have started for the usual Fall rise. We will watch what happens with attention.

The man who wants to make 25 or 30 per cent. on his capital yearly does not necessarily have to buy on a margin. In the normal year of 1909, if he had put about \$1,000 into American Smelting, for instance, in February at, say, 80, he would have had 12 shares. If he had sold in August at 102 (not waiting for the exact highest price) he would have made \$264. In September he would have repurchased at least as low as 95, and sold in the following January at 103, with \$96 additional profit. Total, \$360, or 36 per cent. This is not an extreme case. More money could have been made on lower-priced shares. Less would have been made on high-priced shares. The example shows, however, what can readily be done, if a man is content with a good income on his money and does not set out to make a fortune in one year.

52 Broadway.

CONSULTATION FEES

WE would call the attention of our readers to an important case appearing in the Legal Intelligence of this number, which emphasizes the fact that a qualified dental surgeon is entitled to charge a fee for a professional consultation, and is therefore in exactly the same position as his purely medical colleagues, and in a different position from the unregistered and unqualified practitioner of dentistry, who is unable to claim fees in a court of law.

It should serve as a useful warning to persons who are tempted to evade these just and proper charges. In the present case, the defendant, according to our report, stated in a letter to the plaintiff, "I did not undertake to pay you for a consultation and shall not do so."

It transpired for the plaintiff's evidence that nearly half an hour was occupied by the consultation, which she did not deny in court, and in spite of this she appeared to regard it as a sort of right to be able to take up a busy practitioner's time without the slightest intention of paying a fee.

We congratulate the plaintiff on the verdict and think he deserves the thanks of his professional brethren for having brought this case into court.—*British Journal of Dental Science.*

DOES IT PAY TO BE "A GOOD FELLOW?"

By "E. P."

Nor does it pay to be a boozier or an "all-nighter" or "one of the boys."

But, does it pay to take time for social events? When you come home dead tired, does it pay to dress up and go to some "function?" Or to give your evening to some of the causes which help the community?

In a town not far away, two dentists divide practically all the business. One is a "good fellow" in the proper sense. The other is not. Both are moral, both are gentlemen, and the stay-at-home is probably much the better dentist of the two.

The "good fellow's" fillings don't "stay put." Some of his plates are hardly medium. And his treatments are uncertain. If it weren't for his social qualities, he couldn't last very long. Yet he continues year after year to do a good business.

How does he do it?

His moral character is excellent, his address pleasant, his manner plausible. He sings in church; he teaches in Sunday School; he belongs to secret Orders. He makes many friends. And from his friends new patients are constantly recruited.

He doesn't always hold his keener-minded patients. Many of them go to the other fellow who doesn't need to make so many excuses.

But there are always enough people who are not keen-minded, to keep the "good fellow" going.

Meantime the stay-at-home has a little over one half as much business as he should. He has "cut out" the social end of life. He doesn't dance. He could sing but will not. He could play but he won't. He has grown more self-centered, more dogmatic, less affable.

If he would set himself to subdue this self-secluding tendency it would do him good. If he would mingle socially in the community according to his time and strength, people would know him better; they would catch sight of his many excellent qualities, and to those patients, that he holds because of his skill, would be added new ones from among new friends.

It pays us to be "good fellows" so far as mixing with the social life of the community goes. It makes us broader, holds back the development of rough edges, allows people to know us—and builds our practices.

Many a man of limited skill has built a good practice by means of his social habits. And any dentist, no matter how great his skill, will stand better in the community and be a bigger, broader, better man if he is somewhat of "a good fellow" in the proper sense of the term.

EXPERIENCES *

Editor DENTAL DIGEST:

It is interesting to read the experiences of others, and somewhat selfish not to relate our own if they might be of benefit to others. I am convinced that my methods are different from most dentists, so am going to relate some of mine.

I am thirty-eight years old and have been practising twelve years in a city of 54,000.

My cash receipts were \$7,857 in 1907, \$6,866.50 in 1908, \$7,057 in 1909 and \$7,107.50 in 1910. You will note that a decrease of \$1,000 is shown in 1908 compared with the previous year; of course this was due to the panic.

My office hours are nine to four o'clock. Do not open office on Sunday, do not wait for patients after office hours or make engagements after four o'clock. Patients must come when I say or go to someone else. Have found that patients as a rule have more respect for a dentist who is independent, or is not too accommodating. Am perfectly frank and honest with my patients both young and old, am glad to tell them in the beginning what work will amount to, and if price given them is too much, the bill is rendered for correct amount, and if the price given is too small the bill is rendered and itemized, and the price quoted in the beginning is accepted in full payment.

My time is not always filled with appointments, and seldom have appointments over four days ahead. I do not make definite appointments for short operations; do not wait over five minutes after appointed time for patients and often call up city patients and change appointment for the benefit of country patients. I have three dental chairs and often have them all occupied at the same time, two of course for short operations.

I do not charge patients by the hour, but for each operation. Prices for gold fillings \$3 to \$7.50, amalgams \$1 to \$1.50, gold crowns \$10, bridgework \$10, Logan crowns \$5, Richmond crowns \$10, porcelain fillings \$5. Seldom use inlays of gold. Do my own laboratory work.

Seldom make patients pay for broken appointments. Do not charge for examination except in a few cases; usually ask and get a deposit from new patients. I do not take a vacation, consider afternoons and mornings spent at my beautiful home enough vacation. This home of

* The writers of these three experiences are the winners of the prize—"An Atlas of Skiagrams Illustrating the Development of the Teeth"—offered in the March DENTAL DIGEST, 1911.

six and half acres and dwelling is located on car line, seven miles out, and has been improved and dwelling built at a cost of \$13,500. Should I put it on the market it would bring not less than \$20,000. Have been married six years and had saved practically nothing before, yet my practice averaged \$5,500 a year, for the six years before this happy event. Have the finest wife and two year old daughter in the world, and might add that I am perfectly happy.



Home of Dr. E. L. J.

I sleep out on the porch in the open air, retire at nine o'clock and rise at four thirty, and work with my poultry until seven thirty o'clock, then dress, have breakfast and go to office. Have almost 500 South Carolina White Leghorns which I might add, pay me a handsome profit. Considering the work I do at home and office I am at it about twelve hours a day.

I have a young lady assistant who keeps instruments in place, mixes amalgam, cement, cuts and prepares gold. I also keep office boy fourteen years old. Do not keep automobile, but keep my credit gilt edge, have always paid my bills promptly and can go to my bank and borrow \$500 to \$1,000 on my individual note. Let me tell you, young man, if you have lived in the same town or city three years and have not a good credit with your bank you are not living right. Keep informed

about your patients as your banker keeps informed about his depositors.

I was about to forget to tell you that my losses are less than three per cent; some will not believe this when I tell them I send out forty to fifty bills by mail each month.

My brother, make your office hours shorter, make your patients respect you and behave themselves. Get out on the edge of town and work your garden, and keep poultry. Develop speed, young man, and quit talking to your patients so much while operating and make them pay you.

E. L. J.

MY EXPERIENCE

STARTING practice in a town of 14,500 with already five well-established dentists, looking too young and without any confidence in myself, because I hardly had any practice except at the college where the demonstrators were no better than the students, was not to look forward to a very bright future.

I began very moderately. Having but one large room, I divided it by a screen, using one side for a waiting-room and the other for an operating room. The latter was furnished with a chair, a cabinet and the instruments I had used at the college.

But a few months later, seeing that the business was going on pretty well, I had the telephone put in. I also bought a fountain spittoon, an Allan bracket and furnished an extracting-room, paying cash for everything I bought, thus saving the discount. That was and has always been my line of conduct. Dentistry is for me a kind of business out of which I try to make money.

Each patient that comes to me goes away satisfied. First, because I am always polite and courteous with every one, whether rich or poor. Second, because in my first years I had to use diplomacy. For instance, if I had a case in which I could see that the work would not be as good as intended, I would tell my patient of the bad conditions under which the work had to be done and to come back if anything wrong should happen.

I did not care much then for the price. Cash or credit, everybody found me smiling. My prices not being very high, I trained myself to be a quick operator, so I gained on time what I lost on prices.

A thing I never do is to try hard to induce a patient to have very expensive work done. When asked for advice, I just tell the person what I think of it and let her decide herself. No more dentistry talk outside the office, unless especially asked to do so.

I help those who help me, trade with people who are my patients or apt to become so and do not stick to only a few intimate friends who are about on the same standing, financially speaking, as I.

I keep show horses that I exhibit to the yearly exhibition. That, being a good advertisement brings me in connection with a class of people that count in a practice.

Now, I have the best equipped dental office in town, a good mechanic trained by myself, an assistant (a girl) who does my bookkeeping and people that come to me are the guarantee of the work done before.

My cash which is well placed on good securities brings me \$1,500 interest a year.

All that done in ten years' work.

L. F.

I WAS born and reared up to the age of fourteen in a small country town, where I received a common school education. At that age I moved to a small city and secured a four-years' course in a very good high school. I entered college immediately after being graduated from a high school, with very high aspirations and ideals relative to the dental profession. When I departed from the University of — I took with me my high school diploma as well as credentials of character from reputable men in our city. I had been led to believe from the catalogues and literature of the different schools that these were absolutely required.

Imagine my surprise when I presented my credentials to the dean of the college and later received them back unopened. I was shocked to see and hear the entrance requirements ridiculed by my fellow students (?) as a "huge joke." Some of my classmates lacked even a common school education to speak or understand the English language.

Yet these had all been admitted to the study of our profession in one of the leading dental colleges of the United States.

One of the first things required of us as freshmen was that we purchase a list of instruments. This list was compiled by a dental depot and most of the instruments were useless. Yet we were compelled to purchase the complete list before we would be allowed to enter upon our laboratory technic work.

In the freshman year we also took up the course of dissection, the chief requirement of which was the payment of the extra fees for each part dissected. Many students never so much as appeared in the dissecting room, and the test given at the close of the course was less than a matter of form. This was also the case in the chemical and bacteri-

ological laboratory work—the principal requirement being the payment of the extra fees.

The first two years of our course were occupied entirely in technic work. No student, except the seniors, was given work in the infirmary.

In our entire course we never had a single lecture in dental jurisprudence, ethics, moral obligations, fees, equipment and conduct of an office, collection, or in fact any of the practical sides of the profession.

I was graduated among the honor roll and turned loose upon the public with about as much practical preparation or knowledge of dentistry as I had of astronomy.

After having passed through that heart-rending period so common to new graduates when they take their first bump against the cold world, I finally purchased the equipment of a deceased dentist in a town of 1,500 inhabitants. There I groped my way through the difficulties of learning to handle patients and struggled through the mistakes common to most young practitioners. These mistakes were so costly to my practice and reputation that after eighteen months I decided that the most rational thing to do was to move to a new location rather than struggle to regain the confidence of patients whom I had lost through ignorance of operative procedures and the art of handling patients.

I sold out and moved to a city of 15,000 inhabitants with the bitter lesson of experience burned deep and fresh in my memory, and with the determination to make or break on this trial. I was determined that I should either make for myself the best reputation in that city or I would get out of dentistry and into something else in which I *could* climb to the top.

I began by equipping the most modern office in the city and entered into practice with a definite policy outlined for my success.

I managed to acquaint myself with the leading physicians and surgeons of the city and lost no opportunity of impressing them with the fact that I was fully prepared, both in education and office equipment, to render the most scientific dental services possible. I was conscientious in all my work and charged a proportionate fee—about twice that of the prevalent fees in the community.

I subscribed to a number of leading dental journals and read them religiously, attended all the society meetings possible and endeavored to keep abreast of the very latest and best methods of practice.

Just as soon as my income would permit, I joined the best club in the city and put on a prosperous "front." By judicious inquiry I found that I was fast obtaining the reputation of being the highest-priced but the most up-to-date dentist in the community, exactly the reputation I desired.

I have lost some few patients by charging them a decent fee, but as a rule they were the kind without which I am better off. I have, to an extent, incurred the jealous enmity of some of the older practitioners, but have not allowed their criticism to ruffle my composure nor blur my vision of success. I never miss an opportunity to preach the gospel of good dentistry and mouth cleanliness. I have published numerous articles on oral hygiene and the care of children's teeth (without my signature) in the local papers. In fact I live, think, practice and preach ideal dentistry to the best of my ability and try to teach every patient that all this is far more profitable to themselves than to their dentist.

After having passed through the criticism and at times the condemnation of other practitioners, and still holding my ground for the best services at proportionate fees, I now count the leading fellow practitioners among my best friends and believe I have been instrumental in some of them demanding a fee more nearly just to themselves.

I have now been in my present location a little less than four years and am enjoying almost a full practice and a substantial income. As my practice increases and I realize the fulfillment of the ideals I once held, I just raise those ideals a little higher each year and strive just a little harder for their accomplishment. I have "hitched my wagon to a star" and am thankful that as I climb higher and higher the star recedes above me, for when the day arrives in which I realize there is nothing more to be desired—that day shall I retire and make room for one who has not lost his ambition.

C. H. N.

Editor DENTAL DIGEST:

I note on page 385 of July issue where a daughter of Dr. Joseph F. Metz wears a bridge, age 3 years, 4 months. I go him one better. The son of Dr. W. W. McCord wears two Logan crowns set by myself. When two years ten months old the boy fell and broke both centrals, and I replaced same for Dr. McCord.

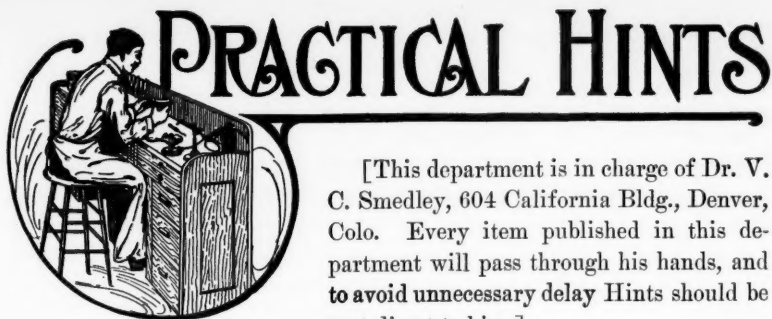
Truly yours,

P. L. W.

Reply to L. P. H. in August, 1911, DENTAL DIGEST:

Most assuredly I would frame the Diploma and Certificate and hang in the office; they make a good impression on all your patients who notice them and tell any visiting dentist that you are no scab.

E. U. F.



[This department is in charge of Dr. V. C. Smedley, 604 California Bldg., Denver, Colo. Every item published in this department will pass through his hands, and to avoid unnecessary delay Hints should be sent direct to him.]

RUBBER HOSE, INSERTING A NIPPLE IN A.—At times it is difficult to insert a nipple in the rubber hose used to connect heating arrangements with the gas supply. Heat the nipple hot enough to slightly soften the rubber; it will then enter easily. Immediately chill in cold water.—*The Dental Brief.*

STEEL WOOL.—Dr. R. D. Gee, of Blackfoot, Idaho, recommends "steel wool" as superior to sandpaper in preparing vulcanite plates for the felt wheel. It cuts cleaner, leaves a smoother surface, and is rapid. Steel wool is made by The American Steel Wool Manufacturing Company in four grades, and has recently been marketed in cartons selling for ten cents each. It is well worth a trial. It may be obtained from dealers in painters' supplies. It is recommended for rubbing down varnished work; and for this purpose is far better than sandpaper, as it does not become clogged and useless so quickly. It replaces sandpaper for most purposes, except on a flat surface, and may be used wet or dry. A coarser variety is known as "steel shavings."—*The Dental Brief.*

SAVING GOLD IN DUMMY BRIDGES.—If the price of solid gold dummies appears too high to a patient, the following economic procedure can be employed: A diatoric tooth, of smaller size than the dummy is to be, is selected, the hole in it filled with plaster, and a nail or pin inserted. After the plaster has hardened, the tooth, while being held by the pin or nail, is dipped in liquid wax so as to envelope the tooth with a coat of wax of suitable thickness. The wax is carved with a spatula to proper occlusion, a sprue wire is attached, the tooth invested, and the wax burned out and cast. The author claims for this gold-incased tooth the same solidity as that of an all-gold dummy. The pin or nail is removed, and the hole closed with a little solder.—Escudier, *Laboratoire et Progrès Dentaire*, *The Dental Cosmos*.

FORMULA FOR PLATINUM SOLDER.—The following formula for such a solder is suggested: To 360 grains of pure gold which has been fused and kept at boiling-point in a carbon crucible, 120 grains of exceedingly thin and pure platinum are added, the latter having been cut into narrow strips and gradually fed into the boiling gold.

When the boiling mass has taken up all the platinum, the intense heat is kept up until a point of incandescence has been reached, and a light produced which is too intense for the eye to tolerate. It is imperative that the operator wear blue or amber-colored glasses to protect his eyes.

The molecular union of the two metals having taken place, the ingot is allowed to cool somewhat, and is then plunged into water, and thence into an acid bath, for the purpose of proper cleansing. It is flattened upon an anvil and then rolled to 26-gauge thickness. The plate thus obtained gives us a twenty-five per cent. platinum solder, which should be properly marked in several places, and is then ready for use. This solder, if kept thoroughly clean, requires no flux.—H. F. CHAYES, *Items of Interest*.

HARDENING PLASTER CASTS.—Two or three coats of a saturated solution of borax or alum are applied with a brush to the cast, then two additional coats of a hot saturated solution of barium chloride, followed by a rinsing in soapy water. The model is then washed off in water, and allowed to dry. Another method of obtaining an exceedingly hard model consists in dipping it in water to which a small quantity of gum arabic has been added. In this way a highly polished surface is obtained.—J. SCHEMBS, *Province Dentaire* (from *Dental Cosmos*.)

FILING A SMOOTH BROACH TO MAKE COTTON ADHERE TO IT.—To make cotton adhere to a smooth broach, go over it with a file toward the point and in a line with the broach. With the broach in the left and the file in the right hand, place an inch of the broach upon the bench-pin, turn the broach, and use the file as one would in sharpening a pencil. The broach should be untempered. A three-square file, five inches long, slim, tapered, with medium cut, is preferable. The fine, almost microscopic lines thus produced afford a surface sufficiently rough for the cotton to adhere in a clean and effective way.—M. J. EMELIN, *Dental Brief* (from *Dental Cosmos*.)

A METHOD OF RESTORING AN IMPERFECT CASTING IN ALUMINUM PLATE WORK.—Some operators have the misfortune sometimes of obtaining an imperfect aluminum cast. If the flask is carefully separated

after casting and the cast is found to be imperfect, while it is yet on the model a small piece of aluminum is placed over the defect, and the plate is heated with a needle-point flame from the blowpipe within a radius of half an inch around the defective parts. When the metal and the surrounding parts are in a partially molten state, they are ironed together with a suitable round-end spatula, thus saving the cast.—J. F. GATTS, *Dental Summary* (from *Dental Cosmos*).

PARAFFIN FILLING FOR ROOT-CANALS IN DECIDUOUS TEETH.—Hard paraffin is heated in a spoon-shaped spatula and allowed to flow into the cavity. By applying a hot-air blast the paraffin is kept liquid in the cavity, and is pumped into the canals by means of a heated platinum broach. After the root-canals are filled, which can be recognized after the cooling of the paraffin by its resistance to the cold platinum broach, the excess of paraffin is removed, the cavity washed with alcohol and dried, the pulp-chamber sealed with gutta-percha or cement, and the cavity filled with the material selected.—F. METZ, *Deutsche Zahnärztliche Wochenschrift* (from *Dental Cosmos*).

RIVETING, WHY USE A LIGHT-WEIGHT HAMMER?—Heavy blows with a heavy hammer tend to thicken the rivet through its entire length; this is not desired in riveting. In riveting the object is to batter down and expand the end of the rivet. This is done with light blows with a light-weight hammer, struck first around the circumference of the rivet. Only after the edge has been expanded should any blows be struck directly on the top of the rivet. A rivet driven up by top blows only has its head expanded in a thin lamina of metal that has but little holding-strength. A rivet head properly made has a body of metal that cannot be sheared off by any force less than that required to rupture the bolt. A tooth properly riveted to a backing will hold as firmly as though soldered; it has, however, the disadvantage that there is a greater length of pin to stretch under strain.—T., *The Dental Brief*.

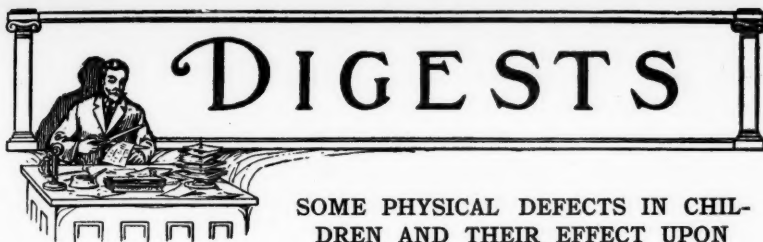
THE STRONG ARM.—Those of you who extract find it necessary sometimes to remove a tooth, or rather what remains of it, which necessitates great traction, and you find your hand shifting on the forcep handle, so that you are compelled to take a new and better grip.

Just keep a little box of powdered rosin back in the laboratory, and before beginning the above-mentioned operation dust the rosin over the palm of the hand. Two individuals will be pleased—yourself and the patient.—C. E. ALLEN, D.D.S., CHICAGO, *The Dental Review*.

HOT WATER IN DENTISTRY.—As a counter irritant, hot water acts by drawing the blood to the surface and distending the parts. This

results in a lessening of the tension in the underlying structures, relieving the congested area. It acts as a diffusive stimulant if the surface to which it is applied be greater in extent than the inflamed area; it further lessens the tension by drawing into healthy surrounding tissues a portion of the blood which ordinarily would have been directed to the seat of inflammation. As it evaporates, and the surface assumes its more natural temperature, it absorbs heat from the inflamed tissues, and then acts as an antipyretic. By relaxing and stretching the walls of the tiny vessels, it promotes diffusion and absorption, getting rid of the products of inflammation by increasing the number of leucocytes. Apart from the influence exerted by any or all of the foregoing actions, it is also a direct nerve sedative. A severe and obscure neuralgia, for instance, will often yield to an application over the affected area, of a hot pack, changed at intervals as it cools. The after-pain from extractions will often be relieved by hot water, as hot as can be borne. Give the patient a cup of hot carbolized water with directions to hold a mouthful over the wounded gum until it begins to cool, then spit it out, and repeat. In about fifteen minutes the pain will usually abate.—Dr. J. O. HALL, *Dental Cosmos* (from *The Dental Brief*).

HOW TO REMOVE A VULCANIZED DENTURE FROM THE FLASK.—If the flask during vulcanizing is fully immersed in water, and the denture removed promptly after the flask has been taken from the vulcanizer, the plaster is usually so soft that there is no difficulty in extracting the denture from it. If, however, it has been vulcanized in steam, the plaster is frequently quite hard and the denture must be carefully removed. The first effort should be to get the plaster out of the flask by cutting with a strong, narrow-bladed knife close to the wall of the flask, and it is well to remember when flasking a case that if the teeth approach unduly the walls of the flask there may be trouble later. Generally, it is best to pry the flask open, now and again; however, to do so is risky. It is always safe to work close to the flask and to continue removing a narrow line of plaster until the mass may be released by a gentle pressure. Once free from the flask, locate the teeth and the rest is easy. When flasking a case, coat the model with oil or a separating solution, so that the plaster will readily part from it after vulcanizing. There is no objection to using a mallet to dislodge plaster from the flask after the denture is removed; to do so before is not wise; the jarring may fracture the porcelain. It is best to remove the denture as soon as the flask is quite cold—never before—and to also at once clean the flask and let it dry. If a case is hurried, and must be unflasked as soon as possible, take it out of the flask *en masse* and remove the plaster from the denture under cold water.—T., *Dental Brief*.



SOME PHYSICAL DEFECTS IN CHILDREN AND THEIR EFFECT UPON DEVELOPMENT *

A PLEA FOR THE SYSTEMATIC EXAMINATION AND TREATMENT OF CHILDREN

BY FRANKLIN W. BOCK, M.D., ROCHESTER, N. Y., ONE OF THE OTOLARYNGOLOGISTS OF THE ROCHESTER PUBLIC HEALTH ASSOCIATION

WHAT do you do if your head aches, or your teeth ache, or you can't hear, or your eyes swim? First, you make yourself miserable and then proceed to make everyone else miserable. Then someone with more than ordinary good sense says, "Had you not better see a doctor?" Taking the hint you go and find you have eye strain, or a bad nasal condition, or bad teeth, or reduced hearing or sight, or some other remediable condition. You get relieved, hence feel better and act better, and when you tell about it afterward you pat yourself on the back for a long-suffering martyr.

Did it ever occur to you that that morose, petulant boy of yours perhaps had one or more of the same conditions which made a bear of you? That the one who doesn't seem to get along well at school, may not be able to see without strain, or may only hear half that the teacher says? Did it ever occur to you that a child laboring under one or more of these physical handicaps had a pretty good excuse for being backward or fussy or even bad. Every physician realizes how difficult it is often for an adult, with years of training behind him, to intercept the symptoms from which he suffers, due often to some seemingly simple little physical disability. Yet many of our children are being punished because they are bad, and overworked when they are backward, while every day they are tearing their little hearts out because they cannot interpret the symptom complex which is depressing them mentally, or stirring up the evil spirit within them.

We have recognized that much of the faulty social development of the child is due to bad home conditions and we have established social settlements with manual training classes and the like, where they are

* Read before the Monroe County Medical Society, May 12, 1907.

taught many things which go to make home pleasant; we have recognized that faulty moral development is often due to bad conditions of recreation or no recreation at all, and we have established playgrounds where their ideals of recreation are led into legitimate healthy channels. Is there anyone who does not now recognize the good these institutions are doing for the individual and the community?

The lay members of the community have done much to improve the social and moral conditions of the children, but what have we as a profession done to improve their physical and mental condition? Have we a family physician in Rochester who regularly examines the children of his patrons, seeking functional and physical defects with a view of improving their mental and physical development and to prevent disease? Is there a physician in Rochester who is paid a regular amount by the year to keep a family well? This may seem like reiterating an oft-repeated dream of the past, but is it unreasonable to ask the physicians of Rochester to give a little more thought to this matter of the systematic examination and treatment of children with a view of improving the race?

It is because of my interest in this work with the children and my association in the nose and throat clinic that I wish to present to-day certain observations which we have made during the past few months. It must be remembered that in no case has a complete general examination been made, and the conditions noted which are not directly related to ear, nose and throat work were discovered because of symptoms which pointed to them. I always note the condition of the teeth, and, when necessary, refer cases to the dental clinic for treatment, and almost without exception I have found it necessary to do so. I believe that among the school children of Rochester there is more than enough necessary dental work to keep a dozen dentists busy for a year. Lately I have also taken note of eye conditions and where there was the least suspicion of defect have referred them to the eye clinic for examination.

That persons with reduced hearing or eye sight are necessarily barred from certain industries, although otherwise capable; that children thus affected are more liable to accident; that children with enlarged, diseased tonsils and adenoids and bad teeth are more susceptible to infectious diseases, and that they are a most potent factor in the spread of such infection; that children of working age, because of their greater susceptibility, are frequently ill and have to stop work and thus retard the wheels of industry—these are all facts which would have to be taken into account were we to consider this matter from a politico-economic standpoint, but of greater moment at this time is the question, what influences have these defects upon the mental and moral development of the child?

Dr. Cronin, chief inspector of schools of New York, says: they have examined, up to September, 1906, 99,000 of the 600,000 children in New York City; that 66 per cent. of those examined showed need of medical attention; that 95 per cent. of backward children have some physical defect; that their experience had been that 95 per cent. of these improve in conduct and efficiency in study after operation of the proper fitting of glasses.

Dr. Charles Bernstein, Superintendent of the State Custodial Asylum at Rome, said in a letter to me a few days ago: "Our experience with the feeble-minded in this institution has convinced us that not sufficient attention is paid to the physical condition of children, especially as regards their eyes, noses, condition of hearing, and particularly the condition of the intestinal tract. As striking examples we can cite the following cases: A boy with favus of the scalp was very feeble-minded, and as a result of curing this disease of the scalp his mind apparently entirely cleared up. The child was taken home and appears as bright as the rest of the children. Another boy, as the result of intestinal disturbances and faulty digestion and nutrition, was entirely cured of his feeble-minded condition by clearing up his intestinal tract. A number of cases of feeble-mindedness, the result of mouth breathing, because of nasal polypus, in which the mental condition decidedly improved as the result of the removal of these obstructions. The driveling idiot type has been eliminated to a large extent by dental treatment, with a consequent improvement in mental condition. Also a number of cases where, as the result of operation for phymosis, the mental condition was very markedly altered for good. Dr. Evans of the University of Pennsylvania says: "Eighty per cent. of the truants from school are suffering from defective eyesight." Dr. Allport of Chicago says: "If the direct cause of criminality and pauperism could be accurately ascertained, I venture the opinion that the prevailing etiological factors would be physical defectiveness and social surroundings."

Now to come nearer home. What is the effect upon Rochester children? I took a list of 46 children which I had examined in four different schools and obtained the standing of each:

- 4 were excellent.
- 9 were good.
- 14 were fair.
- 10 were poor.
- 9 were very poor.

The standing in each case, with one or two exceptions, is directly related to the severity of the nose, ear and throat conditions. One child with one-fourth hearing is in the good class. The five others with re-

duced hearing are in the poor or very poor class. The difference between the age of backward pupils and those in better standing is seen to increase steadily from the first to the eighth grade. This is the natural result of the discouragement which comes to a backward child, when he sees his more fortunate companions steadily going ahead of him, and of the increasing lack of attention which the backward pupil gets even in the best of classes.

I have lately examined a number of children in several of our schools who are known to be very backward. Every one of these needs work done very badly in nose, throat or mouth, and some need glasses. One little eight-year old boy is a very bad case of adenoids and tonsils. This boy at three and a half could count to twenty and knew all his letters. To-day he can only count three and knows only A and B of his letters. I have the promise of this boy's parents to allow me to operate upon him, and also the permission of several other of these children, so that sometime in the future, I hope to give the results of this work with these very backward children. One boy I have operated upon, but it is too early to give any results except to say that when I examined him he had both ears filled with very hard wax. It took several days to remove it all. He could hear a watch at six inches with one ear and not at all with the other. After removing the wax he could hear the watch at five feet, and the next time he saw his teacher, he volunteered the information that "he felt better."

Gradually we are getting the mothers interested. Every mother wants her child to be as bright as the other children, and to have as good a chance, and we are explaining that their children are not having a fair chance. Several during the past week have asked for operation because of improvement in some of the older cases. But, you say, are there no exceptions? Yes, seemingly. The principal of one school was talking to me about this the other day. The pupil in question, a little girl, with one-sided blindness, reduced hearing and tonsils and adenoids, is exceedingly bright. The principal says:

"She has improved steadily in her work during the year. Her teacher notices increasing deafness, and with it increasing eagerness on the part of the child to hear. On the other hand, her brother who is sadly in need of care, is degenerating. During the year his power to concentrate has rapidly diminished. He, too, is far from well. He is the 'tool' for older boys, not seeming to be able to see it. I think it would be quite as worth while to find out why the girl is not affected." Cannot you see that this seeming exception is a very strong argument for the rule? Cannot you see that this girl is using up nervous energy in trying to keep up.

But let me repeat, every defect, whether it be of the eyes, nose, throat, mouth or gastro-intestinal tract adds its weight to the load which is depressing or retarding the child's mentality.

Every year the number of medical students decreases and the number of drug stores, patent medicines and quack doctors increases simply, I believe, because the physicians will not take the people into their confidence about these matters and explain to them how very much easier it is to keep a child well than it is to cure it after it is sick, how much easier it is to prevent feeble-mindedness than it is to cure the child after his mentality has begun to go.—*Rochester Public.*

"HOLLOW WIRE"

A GREAT many dentists would like to eliminate the inconvenience of the alcohol lamp and would like the convenience of compressed air, but do not want to have large, unsightly gas tubing nor leaky rubber tubing.

The desired effect can be obtained by making use of a small hollow wire (such as is used in gasoline lighting systems) about the size of temporary stopping.

The wire is easily bent to meet any requirement and is very cheap (three cents per foot), and will stand a pressure of fifty pounds.

The wire and connections for the same, also air tanks, can be secured from the Superior Manufacturing Company of Ann Arbor, Mich., who would send a catalogue upon request.

Another way I made use of this tubing was to arrange a laboratory light over my bench. From the line of gas cocks at the back of my work bench I extended some hollow wire up to the attachment for the lamp. The attachment for the lamp is the inverted base of an old Bunsen burner, then making a double gooseneck, first one curving down, next one up, with a ground joint between the two (thus making the lamp so it can be taken off at will, also can be moved over more space). The lamp I used was a Reflex with a by-pass connection so it can be turned on or off as readily as an electric.

I have cut my electric bills in half and changed from a sixteen candlepower electric to a one-hundred candlepower gas.

The wire will stand a German silver or gold solder.

Many other ways of using "Hollow Wire" will present themselves.—DEWEY DUANE SMITH, D.D.S., *Dental Summary* (from *Western Dental Journal*).

A COMMUNICATION FOR BEGINNERS : OFFERED WITH APOLOGIES BY A FELLOW PRACTITIONER *

By E. A. BOGUE, D.D.S., M.D., NEW YORK, N. Y.

"He who aims at the moon shoots higher than he who aims at the top of a tree."

Dentistry is something better than the filling up of defective spots in carious teeth. If carious spots exist, the dentist should fill them with such an understanding of cavity form that his filling will not come out; with such knowledge of cleavage that the cavity walls will not break; with such knowledge of tooth form and position that his filling will be, as far as possible, self-cleansing, and the tooth, therefore, safe against recurrence of decay; also with such knowledge of the materials to be used that—excepting in cases of emergency—the filling will become one with the enamel, and will restore, as far as is humanly possible, all the functions of the injured organ.

Dentistry should be able to prevent pyorrhea and all its ravages, except those manifested in advanced age.

I believe we may safely acquiesce in the statement that "There is no disease to which the human body is susceptible that is so positively preventable as caries of the teeth."

Dentistry has up to now mostly consisted in combating two diseases—caries, that first shows itself in childhood, and pyorrhea alveolaris, that is mostly found in adult or advanced life, though it also exists in childhood. Surgical diseases of the mouth arise from neglect of these two conditions, so that if they can be prevented, oral surgery, save that which is necessitated by accidents, will be eliminated. Phosphor necrosis might be ranked with smallpox as a thing of the past.

The dental profession is quite equal to taking its stand among those who strive to prevent disease, and to holding that position equally with other practitioners of the healing art.

Unfortunately, we, as dentists, seldom see our little patients before the fifth or sixth year of their lives, so we are not often consulted as to their general physical well-being. The children come to us, therefore, in these days of modern civilization and luxury, with defects in the enamel covering of their teeth, both deciduous and permanent; also with defects in form, and very often, probably more than nineteen times in twenty, defects in position. All these defects have been defi-

* Read before the Pennsylvania State Dental Society, at its annual meeting, Harrisburg, June 28, 1910.

nately fixed long before the fifth year of the child's life. The enamel organ has finished its work for twenty-eight of the permanent teeth before that period, leaving only the four third molars to be completed later.

When the child is first brought to us, we should, among other things, examine its deciduous teeth with exceedingly fine-pointed explorers, sufficient in number to reach every part of every tooth and with shanks stiff enough to withstand all necessary pressure.

We should begin at one end of one arch, and, mentally isolating each tooth from every other, carefully examine each tooth on its every



ILL. 1.—Showing sad results of extracting deciduous teeth too early.

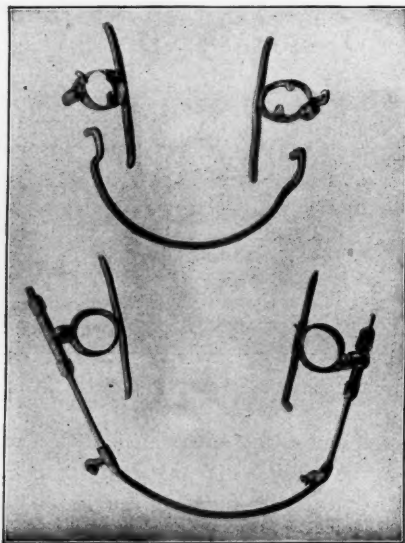
side and on its end, indicating each defect with a colored pencil on a chart such as may be procured at any dental depot.

If approximal cavities are found in the deciduous molars, it is far better to cut right down from the grinding surface with a minim wheel or a small bur and make sure that these cavities are filled, than to leave them to caries when it has once been detected.

Years ago, Dr. Bonwill seemed inspired to pack gutta-percha in approximal cavities of deciduous teeth, letting it extend from one tooth to the other. This material expands somewhat, and thus no diminution of the arch occurs while the gutta-percha remains in place. It is a splendid protection against caries while it lasts. I have known it to last fifteen years in one case, and many times have I seen gutta-percha fillings fully protecting deciduous teeth until they fell out.

We should also note on our examination chart the condition of the deciduous incisors at any given age, and if at five years of age the necessary spreading apart has not taken place, we should seek to prevent the irregularity that is indicated by their not spreading, and should notify the parents of the impending trouble. It will be no discredit to us to notify them, even if they do not avail themselves of our assistance.

If we are able, by means of careful watching and with the assistance of gutta-percha, cement, silver nitrate, and floss silk to keep the deciduous teeth in healthful condition until the time when they naturally should be shed, we shall have done a great deal toward the health of the permanent teeth. We should never, without careful consideration, extract deciduous teeth, lest we also remove the crowns of the permanent teeth at the same time (see Fig. 1). If, in addition to in-



ILL. 2.—The Ainsworth spreading appliance, to which may be adapted arches in swivel tubes, to regulate almost any irregularity mentioned in Angle's classification.

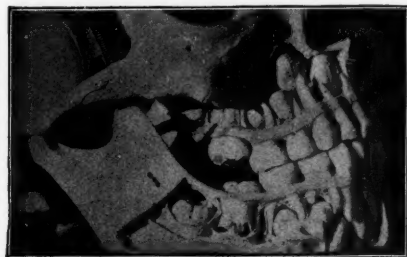
serting fillings, we can induce thorough mastication, the use of fibrous foods, and the disuse of drinks while eating, and can maintain cleanliness, we shall have done a great deal more.

It is also quite possible at or before the fifth year of the child's life, with the careful examination just described, to detect evidence of irregularities. If the deciduous teeth at five years of age are crowded closely together, the permanent teeth are sure to be irregular, unless assistance is given.

In such a case we can readily adapt a little Ainsworth appliance of No. 18 or 20 wire to a set of deciduous teeth, and in a few weeks or months can easily and painlessly enlarge the undeveloped arches laterally to a size that will admit of the proper eruption of the permanent teeth into the arches. While the tongue will generally push the upper

front teeth forward to their places, we may be obliged to assist the six lower front teeth to their places. (See Fig. 2).

This drawing outward laterally of the deciduous teeth into a larger arch is but an assistance to nature, whose powers have not been sufficient to enlarge that arch unaided, and as we draw the deciduous molars to their proper positions the crowns of the permanent bicuspid will



ILLS. 3 and 4.—Showing how the permanent bicuspid crowns are embraced by the roots of the deciduous teeth and are moved when the latter are moved.

also be carried out to their normal positions, and will erupt there. (Figs. 3 and 4.)

That we may clearly understand what these powers of nature are, let us remember that the beating of the heart, causing the pulsation of the arteries lying beneath the dental crypts, which are covered by the enamel of the permanent teeth, is the only power to push these teeth through the gum and to cause their eruption. The pushing of the tongue against the crowns of these permanent front teeth as they erupt is the power that pushes them *forward*, and directs them into their proper arches.

Behind the roots of the deciduous incisors and confined within this small arch are the crowns of the larger permanent incisors, packed in regular irregularity, from about the second year of the child's life. Unless sufficient growth occurs or can be procured, in the forward part

of the mouth, to spread this small arch so as to produce separations between the deciduous incisors and canines, there will not be room for the eruption of the larger permanent incisors to form a larger arch, as they will be confined within the small arch of the roots of the deciduous teeth.

If the permanent teeth cannot erupt normally into this larger arch, as just described, then they will appear retaining in one form or an-



ILL. 5.—Dissection of soft tissue from hard palate and maxilla of a child. Follicles of both deciduous and permanent teeth lifted from their crypts.—Broomell.

other their pre-eruptive irregularities. (See Figs. 5-7.) It is our province to detect this condition, and, if we are permitted, to prevent such deformities by spreading the deciduous arches as described above.

It has been justly said that caries of the teeth is a disease of childhood. The reason of this is probably that we see its manifestations at that period. These manifestations for the most part consist in defects in the formation of the enamel or in the positions of the teeth, or both.

If enamel defects are accurately corrected in childhood, the enamel of the tooth becomes an impervious coat of mail, protecting the tooth from outside influences completely as long as this enamel remains a continuous covering.—*The Dental Cosmos*.

(This article is expected to be continued in the October issue.)

A man who has brains enough to have convictions and moral courage enough to fight for them need not fear even the devil himself.

F. C. B.

DISCUSSION OF TAGGART-DENTAL PROTECTIVE
CONTROVERSY

(Iowa State Dental Society, May 3, 1911)

Concluded from August issue.

DR. TAGGART: (Applause.) *Mr. President:* (Applause.) It is very kind of you. I think, gentlemen, possibly a good deal of this misunderstanding on your part comes from my own delinquency, if I may call it such, in not publishing my side of the case in the journals as some of the others have. I have felt from the start, and I was also advised by my lawyers, that our case was not to be fought in the magazines. Of course particular friends of mine took up the subject and wrote on the subject from their own viewpoints without getting any of the facts from me. Now, in the first place, you have recently seen somewhat of a call for money from what is known as the Washington contingent. I sued a man by the name of Dr. G. W. Boynton in Washington. I never knew there was such a man and I have never met him yet, so there was nothing personal in that. We chose Dr. Boynton, however, because he was a prominent man in Washington; he was president of the Washington Dental Society, a very aristocratic organization having some ninety-five members. He was chosen and the only thing I had to do in choosing him was to say to my lawyers: "Pick out a big man; there is no satisfaction in licking a little man." So they chose Dr. Boynton and immediately a committee was formed to get money. They sent out statements which possibly you all remember, some 30,000 the first time and 25,000 the second time asking for funds. In these articles they stated that Dr. Taggart was a hydra-headed monster trying to sap the blood of his profession. They called me Shylock demanding my pound of flesh. All those scurrilous things, which are really the subject of libel, were said about me and against me. For that reason I kept still, did not state anything about the patents which I possessed. I will now give it to you for the first time. The original patent all went in as one. We cannot establish the rules of the patent office just because we think we would like to for our own benefit. I put those patents in as one patent because there was a fee of \$65; if I divided it up into two it would be \$130, and if I went on and multiplied it it would go up in proportion, and so, for economy's sake, it was put in as one patent. When it went to the patent office they insisted there were four distinct patents and we were hoping to cover them all with one blanket. So the patent office of the United States first made me take out what was known as the process patent, and the one that you are objecting to, and the other patents all went in at the same time. This Washington contingent now has been trying to poison your minds by saying that on account of the fact that they had me beaten in this patent suit I had recently taken out two more patents. As a matter of fact, the two patents which have just been granted to me have been in the patent office four years and they were the very first patents that were applied for. So that knocks all of that nonsense out of the question. So that the process patent was forced on me. So much for the process end of it. Now then, as to these other patents that I possess: We will suppose, for instance, you should beat me. I don't say you, but I mean the profession should beat me in this lawsuit. Remember that would be on the process patent. I have got three other patents that are so much stronger than that process patent that it would make you weep to ever think that you were foolish enough to ever try to fight me. The patents on machines and method are so much stronger than the patent on process that I would gladly to-day wipe the process patent off of the slate and rely absolutely on my machine and my method patents. Not only that: We will leave out the question of the machine, the method and the process patent. I have a patent issued on a product to manufacture a cast filling made of molten metal. Can you

beat it? Now, I will be awfully glad if any of you will ask me some questions, but before I come to that I wish to say this: Dr. Crouse had an inside view of this patent; he knew what I had besides this process patent that you are all clamoring about; he knew that I had these other claims, and as a good attorney for your side, he advised you to compromise and settle with me because he felt as though I was going to beat you. Now, that is always considered very good policy on the part of an honorable attorney. On the other hand, some of you seem to think that in the case of Dr. Crouse, he is getting the \$15.00. I am getting the \$15.00; he does not get a cent of it. What object is it to fight and work as he is doing? He does not get a cent of it; every bit of that is turned right over into my hands. Now, lots have said—and it has been stated here to-day—that if I would withdraw my suit the dental profession would come to the front. Why, gentlemen, I never commenced the suit until you did not come to the front. If you had come to the front in even a half-hearted way no suit would ever have been established. I do not believe there was a man who went around among the dentists in the state of Illinois more with a glad hand and kindlier feeling than I did and they came to me and said: "Don't take out a process patent." I had started to take out a process patent and some of the strong men of the United States, and when I went down to New York Dr. Ottolengui, Dr. Tracy and half a dozen other men said to me: "Taggart, don't take out a process patent." I said, why? Well, this was a question for humanity; humanity should get the benefit of this; it was a humanitarian process and why not give it to humanity and raise a monument for myself? I said: "You know when a man tries to raise a monument for himself what they do for him. The monument has got to be raised without his help." I said: "Gentlemen, I will tell you what I will do. If you will band the dental profession together and give humanity the benefit of this great invention I will turn it over to you free of charge; I won't ask a cent for it; but I do not propose to let the dentists call themselves humanity, reap the reward and let their patients, rich or poor, pay them more for their work in their offices and make the money off of them. I am perfectly willing to share it with humanity." How many of you have done it? Haven't you all raised your fees? Haven't you been better dentists? Have the patients—humanity, as you called it when you were trying to appeal to me—has humanity benefited except in lessened pain and fatigue, but financially has humanity benefited? Not one iota! You have all got better prices; you have all been allowed to do more work in a year and you consider yourselves humanity and reap the reward. Now, I would to-day wipe it off if you will get any body of men strong enough to band together and make humanity the beneficiary of one-half the charges you are making them to-day; I will give the whole thing to humanity, but you won't do it. Now, if there is any question I would be glad to hear it.

DR. SUMMA: Dr. Taggart, did you make that statement that you were willing to give it to the profession for a certain sum? That is a thing that I have been looking for. The only thing I find is Dr. Noyes' statement and there was no authenticity attached to it. I personally believe that you are entitled to something and this is a nominal sum as I stated. I am perfectly fair about that, but I never knew what you wanted until it came out in the suit. Then I did not know how things were going. I did not like that attitude; I confess that it came through the protective association and that I object to right now. Cannot you make it open in some way to the profession and take it up yourself and let the Dental Protective Association out of it?

DR. TAGGART: Now, gentlemen, you would not admire me if when I got a punch in the face I fell down. I cannot do that, gentlemen, now. It is too late for that. There is not a man in this house that would admire me if I fell down now. Now, remember that inside of a year a thousand dentists in the United States were using this process where never a one of them had ever used it before. Now, if thirty thousand men are doing work and using a process like this, naturally some one will

say: "Well, if Taggart will only come off of his perch and give it to us for a mere nominal sum, we will accept it." So a committee was formed by the northern Illinois Dental Society of five of the leading members of the state of Illinois. Among them was Dr. Edmund Noyes, Dr. Truman W. Brophy, Dr. E. H. Allen of Freeport, Illinois, Dr. Cormany of Mount Carroll, and Dr. F. E. Roach of Chicago. That committee of five was appointed to wait on me and see what I would be willing to settle with the dental profession for—how much per capita. I consulted with my lawyer and gave a price of \$50.00. When the meeting came I wrote that letter to that committee and handed it to them when they came and met me in my office. When they received that they said: "Well, Dr. Taggart, that is much more liberal than we ever expected you would be—\$50.00; we will have ten thousand men out of the forty-five thousand dentists in the United States; we will have ten thousand of them in due course of time." Gentlemen, that was spread throughout the world; it was copied into the foreign journals; it was sent to all the different journals and printed and those who did not receive it copied it so that I personally have seen it in half a dozen different dental journals. Now, then here comes in this gratitude that they said they would feel if Dr. Taggart would only come off his perch. What happened? By that time there were thirty-eight thousand dentists using this process. Out of thirty-eight thousand dentists in the United States five men sent \$50.00 a piece. Now, talk about what the dental profession will do if they are given a chance. Now, then we come to this other proposition of Dr. Crouse and the Dental Protective Association. Dr. Crouse and I have had an Illinois dental friendship for the last thirty-seven years. We have been good friends all that time. Dr. Crouse was working for the dental profession and I was one with him. When the time came for this controversy to come up Dr. Crouse commenced to pound me for lower and lower fees for his protective association. He pounded me down from \$50.00 to \$40.00, to \$35.00, \$30.00, \$25.00, \$20.00, \$17.50 and finally he came down to \$15.00, and during that time it nearly broke the friendship of a life-time between Dr. Crouse and I and you now condemn him for fighting hard and making a connivance with me. As though he was going to receive any profit from it. Gentlemen, he does not and is in no position to ever receive one penny from this unless you vote it to him as a vote of thanks. Now, on the other hand, you are misinformed about the company that is going to take hold of this and exploit it. Gentlemen, there has never been a man who has put one dollar into this proposition, there has never been one penny's worth of stock or interest in it sold to anybody and there is no one who owns one bit of it but W. H. Taggart. (Applause.) Now, if that is not a plain enough statement I do not know what statement to make. I would like to have you ask some—not a foolish question—but some leading questions that would smooth this all over and make us all better friends.

VOICE: What claims, if any, have been granted on a process patent?

DR. TAGGART: The suit is in court.

VOICE: I understand, but now then, for what do you expect to claim remuneration until after the claims have been granted? How can you anticipate, in other words, anything that would remunerate you? I am simply asking this as a matter of personal information, but how can you at this time anticipate anything of value until after this has passed the patent office and the courts?

DR. TAGGART: Well, it is like this: If my father had left me a corner lot and way back a good many years before he may have failed to pay the taxes for one year and some one would come in and try to dispose of the title. Could they? You might beat me, but I would try and sell the property if I could; I would get my money out of it if it was possible. I do not mean that I am going to with this. One of the most uncertain things in the world is a lawsuit. The judge has to look at it from his viewpoint, but we are relying, gentlemen, on this fact: As a rule, judges are old men and old men have lost their teeth through the

carelessness and bad habits of dentists pounding the life out of them. Now, in steps this process and saves the old judge's teeth and he is going to be on our side. (Laughter and applause.)

VOICE: I don't want to start an argument, but it seems to me—and may I say in this connection that I have had a little experience in the line of patents—but it does seem to me that that opens up the very point of this discussion and that is why I bring it up for personal information. Now then, this attorney that has paid the taxes on this lot at one time has been protecting his ward. The Dental Protective Association, being the attorney, has laid down. Who is to fight the battle now? Who is to fight the battle for the ward if the attorney quits?

DR. TAGGART: Well, let me tell you this, gentlemen. Speaking about the amount of the remuneration, you place me on my manhood as a man and suppose that if I had a controversy with a man and he tried to down me and I had succeeded in getting the upper hand of him, do you think I would apologize to him? You know you would not. You know you are getting bargain prices for \$15.00.

DR. CRANDALL: No question about that, Doctor.

DR. TAGGART: I won't tell you how much I will charge you after I get the supreme court decision.

VOICE: Well, Dr. Taggart, you will have to admit that you have made a mistake in bringing this out too early.

DR. TAGGART: Yes,—but it is \$15.00 to you to-day.

VOICE: In offering this to a bunch of men, we will say the Dental Protective Association, for \$15.00 then it will be impossible after you have made that tender to collect any more than that.

DR. TAGGART: Oh, no, no; don't think for a moment that my lawyer was foolish enough to make this a world-wide proposition. If the lot is mine I can sell off one foot of it, two or ten. Here, I can charge this man \$5.00 or this man \$10.00.

VOICE: It cannot be done in other things; why in this?

DR. TAGGART: You wait; this is for the future.

DR. WATTS: This is not Dr. Taggart we are discussing. We have all been off of the issue. And pardon me just a moment. Are there any other people that can get a proposition like this? Can you take \$50.00 yet in place of the \$15.00 and \$10.00 or the \$15.00?

DR. TAGGART: Sure!

DR. WATTS: All right. Could the \$25.00 go to you in place of \$10.00 going to the association? There are a good many men here to-day who do not object to paying Dr. Taggart. I think they all want to do so, but there is a certain line of information comes and you get a stick in the ribs and you fuss, not because you object to Dr. Taggart because you are willing to pay him—that is if you have to—but we don't like to have the man that put the prod into us make us put up the money, and would it be possible for Dr. Taggart to get the whole works? Would that be satisfactory to the doctor? Would he make the same proposition and could he accept it all? Could he accept the \$25.00 without it going through the hands of the Protective Association?

DR. TAGGART: No, sir.

DR. WATTS: It takes \$50.00; all right. But the only objection is the fellows that are putting the prod into us—and I think all this trouble was caused, not by you, because we all take our hats off and took them off before this ever came up and they continued off—but the thing we do object to is the manner in which they are coming after us.

DR. TAGGART: Here is a point to be explained. This \$15.00, every cent of it goes to me. That comes into the protective association from the old members who have already paid their \$10.00 and have been staunch members of the protective association; they do not have to pay anything more at all to the protective associa-

tion; that \$15.00 comes to me. Now then you, as a member of the Dental Protective Association would not want the whole outside world to come in unless they paid the same price to be protected that you had paid.

DR. SHRIVER: They have been protected all these years.

DR. WATTS: If you can take the \$25.00, all right.

DR. TAGGART: No, there is no more compromise that way.

VOICE: What is the lowest fee for which you can get immunity without going through the Dental Protective Association? There is not twenty per cent. in the state dental society that belong to the protective association and there is a feeling that it is simply coercion to be compelled to join the association, and that is where the whole trouble has arisen.

DR. CONZETT: Your original proposition to the Northern Illinois Society still stands, doesn't it?

DR. TAGGART: Yes, sir.

DR. SHURTLIFF: In other words, to build up a monument of \$450,000 to the Protective Association.

DR. TAGGART: No; you do not have to come into it.

DR. SHRIVER: I was going to say this: Seven thousand of us have protected over twenty-five thousand that did not join the association with our fees; about seven thousand have protected all the profession.

DR. ROE: I am one of the seven thousand. I just want to say this and say it loud enough so that you all will hear: I am interested in hearing what the other fellow says. I want you when you get on your feet to talk loud enough so the other fellow over here will hear you.

DR. ELMQUIST: I want to ask Dr. Taggart this question: If all the members of the Dental Protective Association will pay their \$15.00, whether the receipt or certificate which they get will be signed by Dr. Taggart so as to prove that they are immune?

DR. TAGGART: Every \$15.00 that comes in gets a receipt signed with my name and no one else's. You get a certificate to that effect showing that Dr. Crouse has no interest whatever in that \$15.00.

VOICE: There is a \$10.00 fee that comes in there somewhere.

DR. TAGGART: Let me explain a little matter by telling a thing that happened at one of our six round-no-decision-goes. Of course I pose before the dental profession as not being anything of a business man, but at this business meeting of the Dental Protective Association and myself after we had come to an amicable settlement then they began to talk, "Now, how about the bookkeeping?" and "We propose that we settle every thirty days, send you the money every thirty days, and in that way we will keep the books." I say: "Now, gentlemen, every time you send me \$15.00 I will give you a certificate for that man. There is no bookkeeping in this thing at all. I get my \$15.00 and you get your certificate." They all laughed; they saw that I had them; not that they were trying to beat me, but they were trying to pose as being so much better business men than I that they were going to put business methods into this, and what is better business method than making them pay the money and giving them a receipt?

DR. McGUIRE: I would like to ask Dr. Taggart a question: He feels that he has won his case, and if he expects to get \$50.00 from every one outside of the association, how does it come that he allowed them to jaw him down to \$15.00?

DR. TAGGART: Not being a business man there was not much diplomacy on my part, was there? I don't think that has anything to do with this particular case.

DR. FOURT: I just want to ask Dr. Taggart if this gives one person the right to practice it for the life of the patent; is it transferable or is it the time while he is in business?

DR. TAGGART: While he is in business.

DR. FOURT: Just to him. He cannot transfer it?

DR. TAGGART: No, sir.

DR. HALLETT: Suppose a member of the Dental Protective Association does not see fit to pay the \$15.00 and Dr. Taggart brings suit against that individual: What will be the attitude of the Protective Association towards that member. (Laughter and applause.)

DR. TAGGART: Now, gentlemen, you have heard that question and you have had your little laugh. Let me explain that to you. In this agreement, which was signed by Dr. Crouse, Dr. C. N. Johnson and Dr. Buckley as members of that Dental Protective Association Board of Directors, the agreement specifically states that any member of the Dental Protective Association who does not pay this will have to settle with Dr. Taggart himself. What would I give you that immunity for if it was not to get help from you. We never give something for nothing. Some one asked why I was allowed to be jewed down from \$50.00. Now, I hate jewing and Jews as well as any of you. At the same time it was not a question of jewing. It was a question—"You give me something and I will give you something."

DR. BALL: Now, I understand that any member of the association is to give \$15.00 and receive a receipt or certificate of immunity?

DR. TAGGART: Yes, sir.

DR. HALLETT: Could a similar arrangement be made with a new protective association?

DR. TAGGART: That is a legal question that I cannot answer. Personally I would say right now that I can see no reason why it should not be, but I want to caution you about one thing. Of course there is no egotism in saying what I am going to say. Would you prefer to place yourselves in the hands of men who make misstatements and misleading statements to you in regard to a proposition like this? Now, here is another one that did not come up, that, in the eagerness of trying to tell it all and more, too, in the limited time, I forgot to state. The committee who has tried to get money from you to fight me has not told you the whole truth. They have got your \$5.00, your \$10.00 and your \$25.00, which you contributed to their fund, but were not honest enough with you gentlemen to say to you: "Now here, remember, gentlemen, you will contribute this and go into it with your eyes open. If you contribute your \$5.00, \$10.00 or your \$25.00 to this fund remember you are a codefendant with Dr. Boynton, and if Dr. Boynton is beaten you are beaten in the same way." Were they honest enough to explain that to you? I have explained to you everything that I think is honest and square in the deal. Now, if the men who are trying to form a new organization will be as honest and square with you as I have been then you can get immunity, but you cannot trust yourselves in the hands of men who do not tell you the whole truth.

DR. ELMQUIST: May I ask another question? If to this protective association we pay our \$15.00 and get our immunity bath, is there anything in that certificate of immunity that prohibits us from joining any other association to fight you in court?

DR. TAGGART: Yes, sir; there is. I would be foolish to give it to you for \$15.00 and not be able to touch you and then give you a chance to go after me.

DR. ELMQUIST: Well, then, it would be cheaper to pay the \$50.00 and get the immunity bath and then go after you and fight you in court.

DR. TAGGART: Sure; a man who is willing to pay for his convictions ought to have the right to exercise them.

DR. BAKER: In case the court decides against you in this case and we have paid our \$15.00 for immunity, then what?

DR. TAGGART: Of course I will hand it right back to you. (Laughter.)

DR. BAKER: Are we fully protected by that?

DR. TAGGART: You know you have got immunity from my patents. My lawyer wanted to get that in without Crouse's knowledge that it was only this patent and

Crouse was shrewd enough to go to his patent attorney and he insisted on it in regard to all my patents.

DR. ELMQUIST: In the future, too?

DR. TAGGART: You cannot buy my brains for the future. I will not put any price on them.

DR. SHURTLIFF: Then there is no way to pay you any money personally?

VOICES: You can pay \$50.00.

VOICE: That has been withdrawn.

DR. TAGGART: Oh, no.

DR. SHURTLIFF: Well, then I will pay my \$50.00.

DR. MARSH: I have felt for four years now that I owed something to Dr. Taggart.

DR. SHRIVER: You had better pay it.

DR. MARSH: Yes, I am going to. I will now if he has a receipt with him. I want to take advantage of this bargain price. I am going to pay \$15.00 and get my certificate. I have been hectoring long enough. If he has the certificate ready I have the money here now.

DR. TAGGART: I did not expect such generosity, so I have not brought my receipts here.

DR. HOFFMAN: The way I understand is that he could pay that \$15.00 and get his immunity bath and join the association; is that the bargain—\$15.00 to join the association?

VOICE: Ten dollars to join and \$15.00 to Taggart.

DR. HOFFMAN: Well, after that does the price go up?

DR. TAGGART: One year.

DR. CROUSE: You have a year in which to settle.

DR. TAGGART: I wanted to make it a month and Crouse insisted on a year. Of course, he has been married longer than I have and he had his way.

VOICE: One question comes to my mind: Dr. Taggart seems to think that the profession should pay him for what he has given them. Now are all of these ideas original with Dr. Taggart?

DR. TAGGART: Oh, no; there were other men before me.

VOICE: Did you pay for your ideas?

DR. TAGGART: Why do you charge a patient anything for the filling in her teeth if that is your basis? You have not done any more for that woman than I have done for you. Why do you charge her anything if you are going to be such a broad-minded philanthropist? Why don't you call them in from the by-ways and hedges and compel them to come in and say: "There was another man before that filled teeth for nothing and I am going to fill teeth for you for nothing, too?" You cannot expect a man to work night and day for nothing whether his life time is long or short. If by the product of my brains I furnish you something that makes your brains worth one hundred and fifty cents on the dollar you ought to be willing to deliver to me a mere pittance of that sum. I have made it possible for this man to do twice the work that he had done before and if the profession had done this for humanity and given the patients—as I said in the early part of this discussion—the benefit of it then I would not have asked you anything, because I am just as big a philanthropist as any.

VOICE: I don't want any one to understand that I think you should not receive anything but it seems to me the whole point is right here: If this patent is paid for will not others patent other processes and then we will be burdened by a great number of them?

DR. TAGGART: Supposing I won my suit to-day; would you consider that you were burdened in following the process? You can keep on following it or quit it. If it was such a burden that you did not want to carry it on, quit using it. You are the one who wants to make money off of this process but you do not want me

to make it. That is what I am arguing. I tell you I could not go into your office to-day and take the process out of your reach for a thousand dollars.

VOICES: That is correct.

DR. ROE: I want to come up and confess and give you the result of my deliberations while the rest of you have been talking. How is that? You know the first thing to do is to get it and then you tell others about it. That is right, isn't it? Now, I was one of the signers to start this—what shall we say?—movement to ask for this information. I have been a member of the Dental Protective Association for sixteen years, also. I paid my \$10.00 and the result of my thinking here while the rest of you have been talking and thinking of what to say, is this: That I believe that I am better off, that the profession will be better off as I think I will be better off by paying my \$15.00 added to my \$10.00; it costs me \$25.00 and I am out of the game and I believe from what I have heard here this afternoon that the men that are not members of the Dental Protective Association that have been taking the results of our expenditures in times past will be better off if they will dig up their little \$25.00 and kind of—swallow.

VOICE: What is it going to be used for?

DR. ROE: Dr. Taggart said he got \$15.00 himself.

DR. SHURTLIFF: How about the \$450,000 that will be gathered? What will that be used for?

DR. ROE: To build a monument. Dr. Crouse did business for the dental profession and he has done business for them for years. It may be that you question whether he has a right to hold his hand on the whip, but I will tell you the man that delivers the goods is entitled to a monument.

DR. SHURTLIFF: What goods?

DR. ROE: Protection, gentlemen.

DR. MILLER: I would like to say that if the immunity that we get and the \$15.00 that we pay equals the other money that we have paid Dr. Crouse it will be well spent. (Applause.) The great trouble here now is that there are only a few of us that belong to the Dental Protective Association. We have paid the money and protected the other boys.

DR. SHRIVER: That is what we have.

DR. MILLER: Now, let the other boys come in and pay their little \$10.00 and help to protect somebody else in the future.

VOICES: Amen! Amen! Amen!

DR. MILLER: How do you know but next week there will be another fight? To-day is not the only day; we have got next year to fight. The patent office is issuing patents every day.

THE PRESIDENT: We do not want to continue fighting process patents.

DR. MILLER: Yes, sir; and we want Dr. Crouse to do it.

DR. MILLER: I will tell you right now when I came to this meeting I was feeling like Dr. Shurtliff and some of the rest were feeling; I did not send Dr. Crouse the \$15.00 because I felt like I felt when I came to this meeting when I got the circular that probably it was not the thing for me to do. But I want to tell you I have changed my mind. I believe that Dr. Crouse has made a big deal for the Protective Association and I have come to the conclusion that if Dr. Crouse had not honestly seen Dr. Taggart, had him by the ear, he would never have made the trade.

VOICE: Mr. President, I would like to ask Dr. Taggart this: Any one having the machine—is that a protection?

DR. TAGGART: That is absolute protection for time and eternity.

VOICES: Buy a machine! Buy a machine!

THE PRESIDENT: The time is getting short and I will call upon Dr. Taggart to close the discussion.

DR. TAGGART: All I wish to say in closing is, I thank you.—*The Dentists' Record.*

EDITORIALS

The editorials for this month take three forms. Each is the expression of some development at the recent meeting of the National Dental Association.—EDITOR.

**THE FORMATION OF
THE NATIONAL MOUTH HYGIENE ASSOCIATION**

IN the eyes of one interested in the cause of Oral Hygiene, the Oral Hygiene session of The National Dental Association was of great interest. The attendance was large and close attention was paid up to the last minute.

Following the meeting of The National Dental Association, there was organized, with the consent of the Executive Council, a subsidiary body which may be made very effective in the cause of oral hygiene, if we, as members of the profession, do our share.

This body is to be known as The National Mouth Hygiene Association. Its purpose is to do on a large scale and with greater effectiveness those things which the Oral Hygiene Committee of The National Dental Association has done on a small scale. It will endeavor to harmonize all present activities in oral hygiene, to collect funds for spreading the gospel of oral hygiene, to aid oral hygiene workers everywhere with data, pictures, lectures or lecturers, plans and methods, and in all other advisable ways.

All this takes money in considerable quantities. So one of the great purposes of this new movement is to provide a means for raising funds to carry on this work.

Here is where each of us may share. We may not be able to organize a dispensary, or make an address, or persuade a city council to vote funds, but each of us may help others who can do those things, or at least do at them better than we. We may become members of The National Mouth Hygiene Association, paying the initiation fee of three dollars and the dues of two dollars. This makes the cost the first year five dollars, and thereafter two dollars per year.

The National Mouth Hygiene Association is broader in scope of membership than the ranks of the profession alone. It takes in people of good repute from other professions. The three Vice-Presidents are from the medical profession. The Board of Governors includes members of the dental profession and noted workers in other walks of life who will take an active interest in this work.

The policy of The National Mouth Hygiene Association will un-

doubtedly be educational rather than philanthropic. Get the distinction clearly in mind. There are two kinds of oral hygiene activities at present in this country. One makes the treatment of the teeth the great object, with the education of the community secondary. The other desires to make the education of the community first, so that the community shall take up the work with community funds and paid workers. This places the financial burden where it belongs, on the shoulders of the community. And the community will undoubtedly benefit by the economies which will finally result. The activities of the new association will undoubtedly be of the latter form, since that is the form which promises by far the greater benefits in the end.

There are many reasons why every one of us should join this Association and send in our five dollars for the initiation fee and dues. This solves in large part the question of obtaining funds, since if we show sufficient interest, it will probably be possible to interest men of large means in the movement. It provides a central organization from which help can be had for any properly organized oral hygiene effort. It enlists the co-operation of educators, since many of the problems with which the teacher has to contend are oral or nasal or aural. And the cause of oral hygiene will receive no small aid at the hands of the educators.

Let us help in this movement. Let our help be personal and verbal and financial. And may we not let the financial part rest till last. Checks or money orders may be addressed to the Secretary-Treasurer, W. G. Ebersole, D.D.S., 800 Schofield Building, Cleveland, Ohio.

The officers of the National Mouth Hygiene Association are as follows:

President, Mr. Horace Fletcher, New York.

First Vice-President, Dr. Eugene H. Porter, Commissioner of Health, New York State.

Second Vice-President, Dr. W. A. Evans, Ex-Commissioner of Health, Chicago.

Third Vice-President, Dr. Oscar Dowling, President Louisiana State Board of Health.

Secretary-Treasurer, Dr. W. G. Ebersole, Cleveland, Ohio.

BOARD OF GOVERNORS.

Dr. E. P. Dameron, St. Louis, Mo.

Dr. Richard Grady, Annapolis, Md.

Dr. J. P. Corley, Sewanee, Tenn.

Dr. W. A. White, Phelps, N. Y.

Dr. B. Holly Smith, Baltimore, Md.

Dr. H. C. Thompson, Washington, D. C.
Miss Cordelia O'Neill, Principal of Marion School, Cleveland,
Ohio.

Mrs. B. Holly Smith, Baltimore, Md.
Mrs. Ella Flag Young, Superintendent of Schools, Chicago, Ill.
Prof. Irving Fisher, member of the Committee of One Hundred.
Mrs. W. E. Walker, New Orleans, La.
Miss Martha Taylor of the Russell Sage Foundation Fund.

MAKING DESIRES KNOWN

As a profession, we need to learn to co-operate in matters outside of our own personal activities. Each of us is so occupied with the task of earning a living, that we are slow to take part in anything which is not directly pressed upon us, or does not immediately affect our own welfare.

The instance which calls forth this particular expression is as follows: In the July editorial in this magazine, the writer charged the members of the Executive Council of The National Dental Association with action regarding the Oral Hygiene Committee of that Association which it believed to be not in accord with the desires of the profession at large. It printed the names of the members of the Executive Council and asked dentists to write to these men, outlining their attitude toward the work as conducted in Cleveland and indicating to what extent they thought it should receive support.

So few of the profession wrote, that the Executive Council had absolutely no guidance from this source as to what the members of the profession at large desired. They were compelled to form their own opinions and act on them.

Now it is not especially important that members of the profession do what this magazine or any other magazine asks, if such a course does not meet with their approval. The important point is this: that as a profession we have neither the habit nor the machinery for expressing ourselves. We are a body of units, not necessarily isolated when it comes to association, but isolated and feeble when it comes to securing an expression.

And this leads to a sort of injustice which is probably more common among us than most of us know. Certain men are at the head of our several organizations. They are responsible for the actions of those organizations, and these actions are often important and far reaching. These men claim that it is practically impossible to get

from the members of the profession any expression which can be used for guidance.

This came out very clearly when certain members of the Executive Council took exception to the July editorial in this magazine. They claim that they acted in the light of the best information presented to them, that their action was taken with thought for the good of the profession, and that there was no intention to restrict the work of the Oral Hygiene Committee, save to keep it within what they believed to be proper professional bounds.

The interest in oral hygiene at Cleveland was so great that it expressed the feelings of those who were present, and the Executive Council granted permission for the formation of a subsidiary body, to be known as The National Mouth Hygiene Association, to act under the guidance of The Oral Hygiene Committee of The National Dental Association as detailed in this issue of THE DENTAL DIGEST. It also granted other important concessions to the Oral Hygiene Committee.

The point of all this is as follows: Let us learn to lift our eyes above the confines of our individual offices. Let us learn to express ourselves in matters which concern us all. Let us grow broader than the mere path of our daily steps. And when others have charge of widespread activities, let us aid them to the best of our ability by expressions of our wishes. If we leave them to find out what we want, let us not blame them if they fail to seek out what we want, nor blame them and call them "politicians" if they fail to do that which, in the secret desires of our hearts, we wanted done.

CORRECTION OF AN APPARENT INJUSTICE

WHENEVER this magazine is mistaken or unjust, it desires to make corrections as quickly as possible and with the same publicity as the original statement.

In the editorial entitled "What Will The National Association Do About Oral Hygiene," the text on page 428 may be so read as to give the impression that the men whose names are there given passed the resolution quoted on page 426. It was not the intention to quote these names as those of the men passing the resolution, but as the men to whom members of the profession might write if they wished to express any desires as to the treatment of the Oral Hygiene Committee in the future.

Dr. Edward S. Gaylord, Dr. H. C. Brown and Dr. James G. Sharp had no hand in the passing of the resolution quoted on page 426.

We are very glad to make this correction.



BOOK REVIEWS

SVENSKA TANDLÄKARE SÄLLSKAPETS HISTORIA. Tryckt Hos, P. Palmquist Aktiebolag, Stockholm, 1910.

We are in receipt of the above book which appeared in connection with the semi-centennial of the Swedish Dental Society, which was celebrated Nov. 21, 1910, at Stockholm.

We desire to thank the editors, Mätte Schmidt and Harald Ramberg, for the book. It is a beautiful volume, profusely illustrated and we are pleased to place it on our library shelves.

ESSENTIALS OF OPERATIVE DENTISTRY, WITH ILLUSTRATIONS. BY W. CLYDE DAVIS, B.S., M.D., D.D.S., Dean and Professor of Operative Dentistry and Technic, Lincoln Dental College, Associated with University of Nebraska, Lincoln, Neb., 1911.

This book is prepared for the use of the colleges, and the information it contains is given in a condensed form. This is well, for the college terms are short, and anything that is presented to the student in a concise, and at the same time, comprehensive form, is likely to be mastered.

The book is divided into forty-four chapters, the contents of each chapter being given in such a manner as to need no index, yet a chapter index is given at the end of the book.

The author says he claims no "originality in the essentials presented, having gleaned the facts from the writings, teachings and utterances of our greatest educators." Be that as it may—certainly those facts are presented in a most readable and attractive manner, and we are pleased to congratulate the author and wish the book the success it so well deserves.

TO MAKE USE OF STRETCHED ENGINE CORDS.—If you have some engine cords which are stretched too much to be of use on your engine, soak them in water for ten minutes. Dry them well, and they will be as good as ever.—P. C. THOMAS, D.D.S., Vancouver, B. C.

SOCIETY AND OTHER NOTES

Officers of Societies are invited to make announcements here of meetings and other events of interest.

NEW YORK.

The next meeting of the American Society of Orthodontists will take place September 20, 21, 22, 23, 1911, Boston, Mass.—DR. F. C. KEMPLE, 576 Fifth Avenue, New York City, *Secretary*.

MAINE.

The seventh annual meeting of the Northeastern Dental Association will be held in Lafayette Hotel, Portland, Me., October 26-28, 1911. Drs. Taggart, Ottolengui, Goslee and Rhein are promised as essayists.—EDGAR O. KINSMAN, D.D.S., Cambridge, Mass., *Secretary*.

NEW MEXICO.

The New Mexico Board of Dental Examiners will hold their next meeting in Albuquerque, October 9. All applicants must take the examination.—M. J. MORAN, D.D.S., Deming, New Mexico, *Secretary*.

The G. V. Black Dental Club will hold its annual mid-winter clinic in St. Paul, Minn., on February 15-16, 1912. A programme of unusual interest has been prepared and a cordial invitation is extended to the profession to attend.—R. B. WILSON, D.D.S., St. Paul, *Secretary*.

PATENTS

- 980,751. Split sliding swiveled dental moulding ring, Philip Bourne, New York, N. Y.
- 980,238. Fan attachment for dental engines, Jonathan S. Frisbie, Rotan, Tex.
- 980,411. Dental impression tray, William M. Gantz, Westerville, Ohio.
- 980,529. Dental matrix retainer, James W. Ivory, Philadelphia, Pa.
- 980,530. Rubber dam clamp, James W. Ivory, Philadelphia, Pa.
- 980,423. Dental apparatus, Peter A. Kanouse, Los Angeles, Cal.
- 981,430. Dental articulator, Patrick A. Kennedy, Redfern, near Sydney, New South Wales, Australia.
- 981,476. Dental impression tray, John A. Rowse, Newquay, London, England.
- 981,638. Dental cleaning device, George B. Hakes, Norwood, N. Y.
- 982,406. Orthodontia apparatus, R. Wiles, Chicago, Ill.
- 982,251. Internal combustion engine, Robert W. Coffee, Richmond, Va.
- 983,174. Dental napkin, Albert L. Simpson, San Diego, Cal.
- 983,538. Dental broach holder, Edward L. Chott, Chicago, Ill.
- 983,685. Artificial tooth, Frank J. Claypool, Ottawa, Kansas.
- 983,516. Detachable tooth facing, George W. Patten, Minneapolis, Minn.
- 983,844. Dental matrix clip, George H. Shannon, Cambridge, N. Y.
- 983,780. Dental chair, Leo Smith, Hammond, Ind.
- 983,579. Making dental inlay fillings and the like, William H. Taggart, Chicago, Ill.
- 13,203. (Reissue) Dental work, Harrison D. Best, Pittsburg, Pa.
- 984,507. Dental motor, William E. Butler, David City, Neb.
- 984,419. Handpiece for dental engines, Frederick W. Dean, Des Moines, Iowa.
- 984,040. Odontometer, George Siverling, Chicago, Ill.

Copies of above patents may be obtained for fifteen cents each by addressing John A. Saul, Solicitor of Patents, Fendall Building, Washington, D. C.